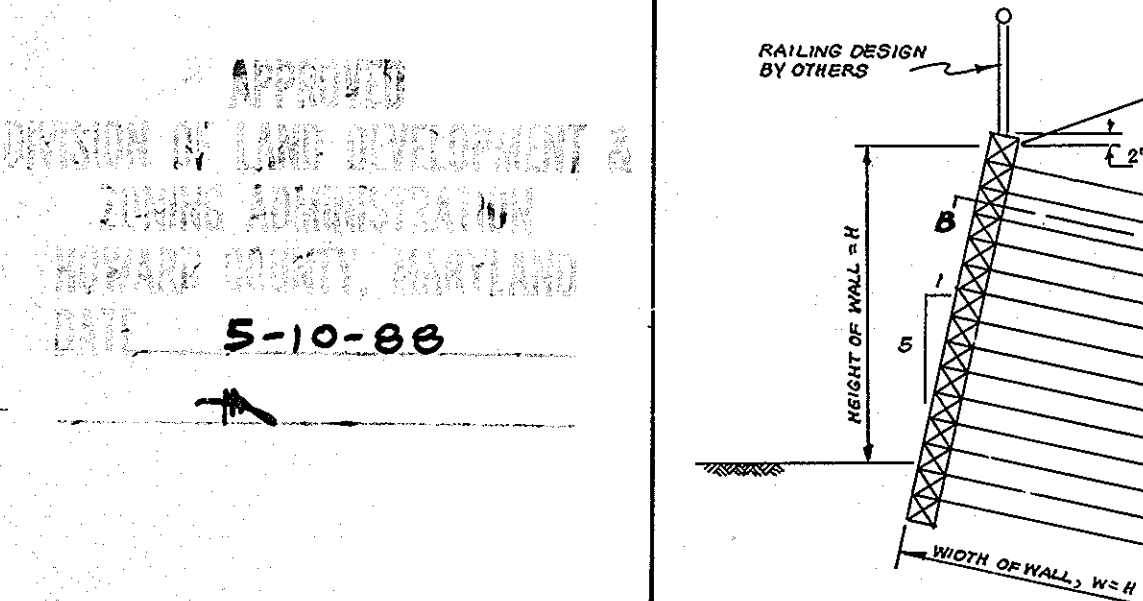


- NOTES:**
- All construction methods and materials for on-site private water and sewer systems shall follow the current edition of the Howard County Plumbing Code, supplemented by the Howard County Std. Details and Specs. where necessary.
  - Sewer House Connections shall be built within 5 FT. of Buildings, at a slope of 2.0% unless shown otherwise in plan.
  - Areas where water house connections are to be built shall be at final grade and connections shall be laid with a min. of 3.5' of cover. Water House Connections shall be seamless copper water tube, ASTM designation 588, Soft Temp. Type K.
  - Where sewer house connections are to be extended from public connections, the material shall be the same as the public portion.

- NOTES:**
- The wall shall be constructed of 6"x6" nominal size No 2 SR or better southern pine timbers. The timbers shall be pressure treated (minimized) in accordance with NWP A std. P5 to 0.40 lb/ft<sup>3</sup> retention for chromated copper arsenate treatment or to 0.50 lb/ft<sup>3</sup> per ammonia col copper arsenate.
  - Reinforcing steel shall conform to ASTM A-615 grade 60.
  - Backfill within retaining wall shall be compacted to 95% of maximum density as determined by ASTM-D 1557.
  - See site location plan for retaining wall location.
  - The contractor will be responsible for temporary support of the slope during construction.

**SCHEDULE OF DETAILS FOR TIMBER WALL**

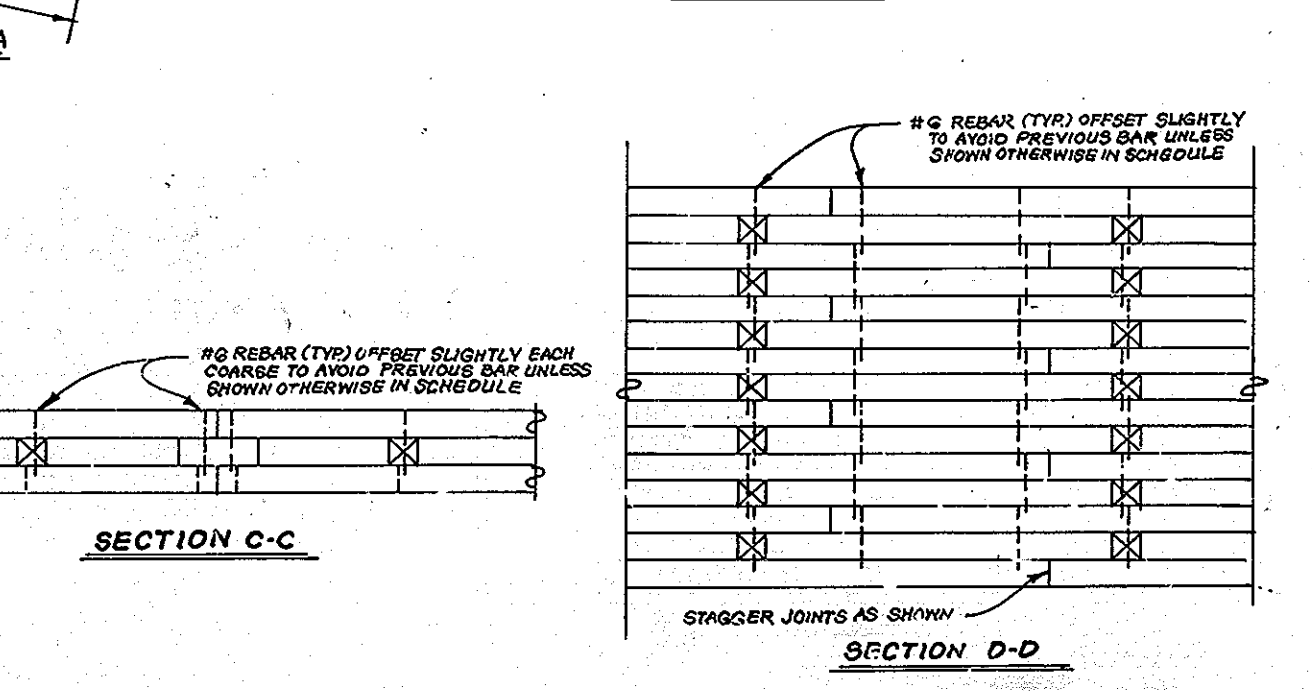
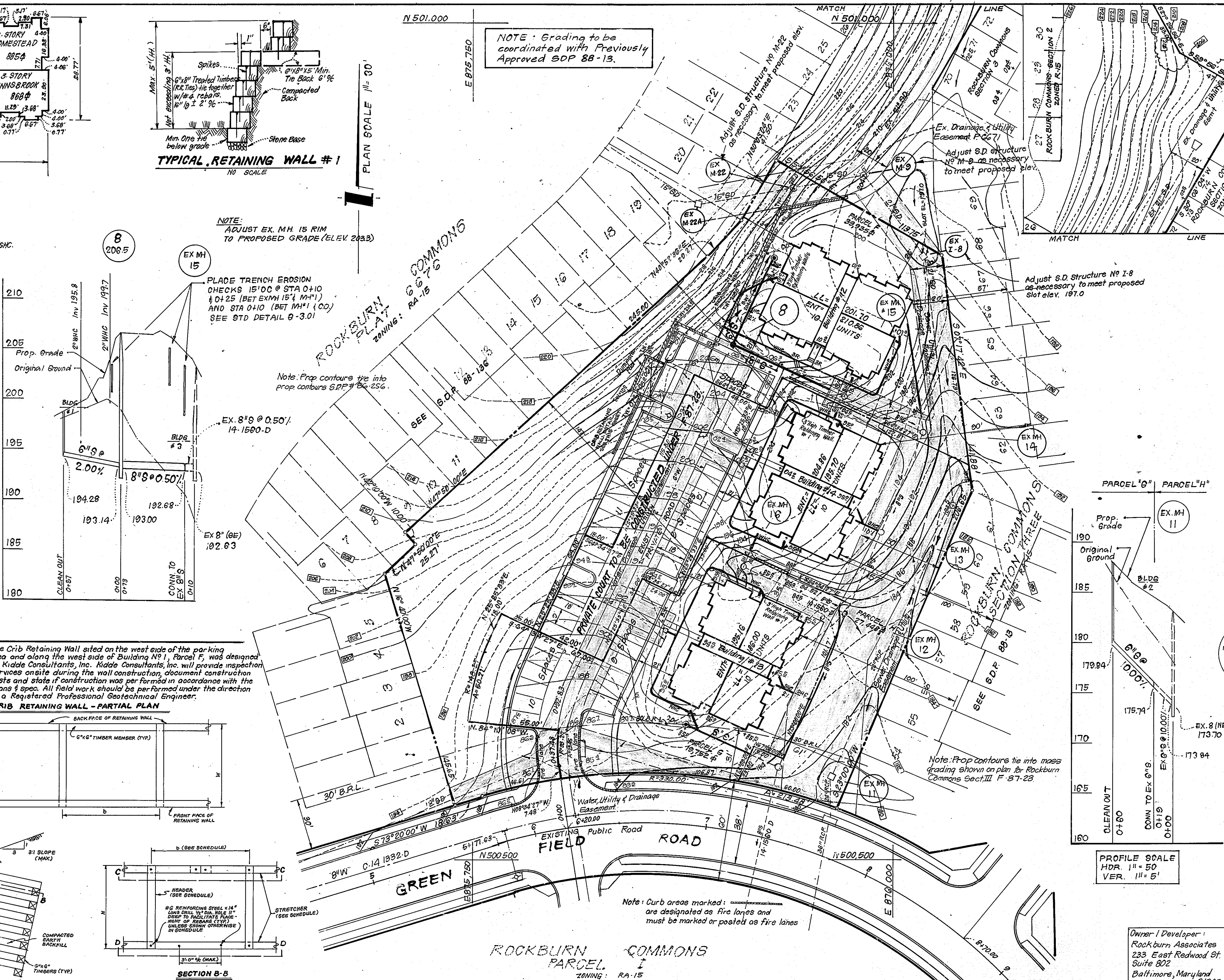
Height of Wall H (FT.)	Width of Wall W (FT.)	Center to Center Spacing of Headers, S (FT.)	Diameter of Reinforcing Steel
6	6	7.5	#5
7	7	7.5	#5
8	8	6.5	#5
9	9	6.5	#5
10	10	6.0	#6



**APPROVED:** FOR PUBLIC WATER AND PUBLIC SEWERAGE SYSTEMS, HOWARD COUNTY HEALTH DEPARTMENT  
 DATE: 12/18/88  
 COUNTY HEALTH OFFICER: [Signature]

**APPROVED:** HOWARD COUNTY OFFICE OF PLANNING & ZONING  
 DATE: 1-17-89  
 PLANNING DIRECTOR: [Signature]

**APPROVED:** FOR PUBLIC WATER AND PUBLIC SEWERAGE, STORM DRAINAGE SYSTEMS AND PUBLIC ROADS, HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS  
 DATE: 1/18/89  
 DIRECTOR: [Signature]

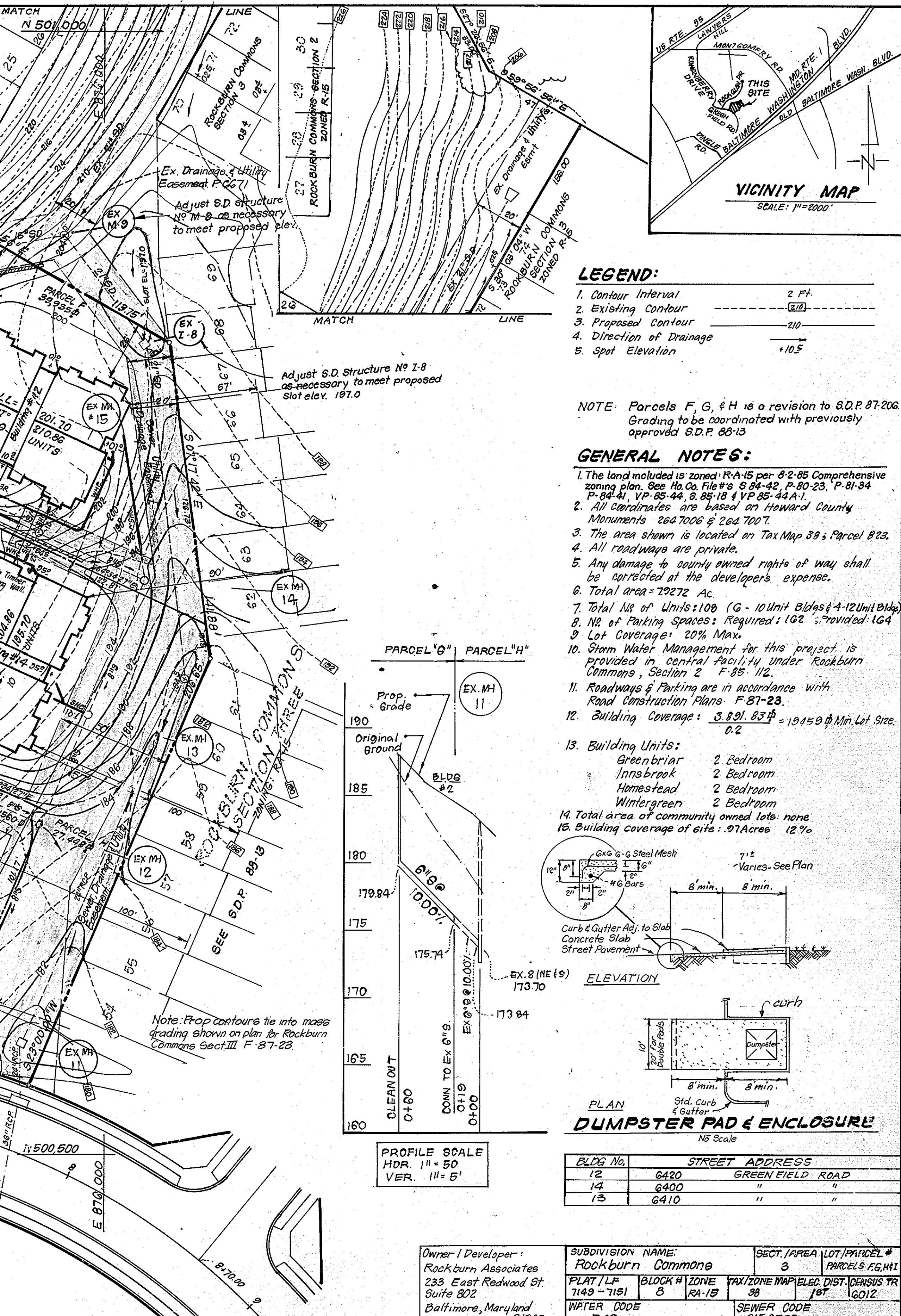


**GENERAL NOTES CONTINUED:**

**14. DENSITY TABULATION**

	MONTGOMERY WOODS	DUAL RIDGE SECTION 1	ROCKBURN COMMONS SECT. 1	ROCKBURN COMMONS SECT. 2	ROCKBURN COMMONS SECT. 3	TOTAL ALL AREAS
GROSS AREA (Acres)	15.63	15.88	1.77	2.32	18.92	61.02
FLOOD PLANE/STEEP SLOPES	0	0	0	0	0	0
NET AREAS (Acres)	15.63	15.88	1.77	2.32	18.92	61.02
APTS/T.H.	294	294	20	40.6	31.8	1180
UNITS PERMITTED (BASED ON NET AREA)	294	294	20	40.6	31.8	1180
UNITS PROPOSED (AND/OR EXISTING)	129	151	20	50	108	598
DENSITY PER ACRE	1.85	1.85	1.13	21.6	5.65	19.6
CUMULATIVE	1.85	3.70	4.83	6.99	12.64	32.24

\* Townhouse Units are not included in this submission see Approved S.D.P. 88-13



**CLARK · FINEFROCK & SACKETT, INC.**  
ENGINEERS · PLANNERS · SURVEYORS  
7185 MINSTREL WAY · COLUMBIA, MARYLAND 21045 · (301) 750-8100 BALT. (301) 521-8100 WASH.

**OWNER/DEVELOPER:** Rockburn Associates, 233 East Redwood St. Suite 802, Baltimore, Maryland 21202

**SUBDIVISION NAME:** Rockburn Commons

**SECT./AREA LOT/PARCEL #:** 3 PARCELS F, G, H, I

**PLAT/LF BLOCK # ZONE TAX ZONE MAP/ELEC. DIST. DENS. TR:** 7149-7151 B RA-15 3B 1B1 6012

**WATER CODE:** 700 **SEWER CODE:** 2150533

**DESIGNED:** JME **SCALE:** 1"=30'

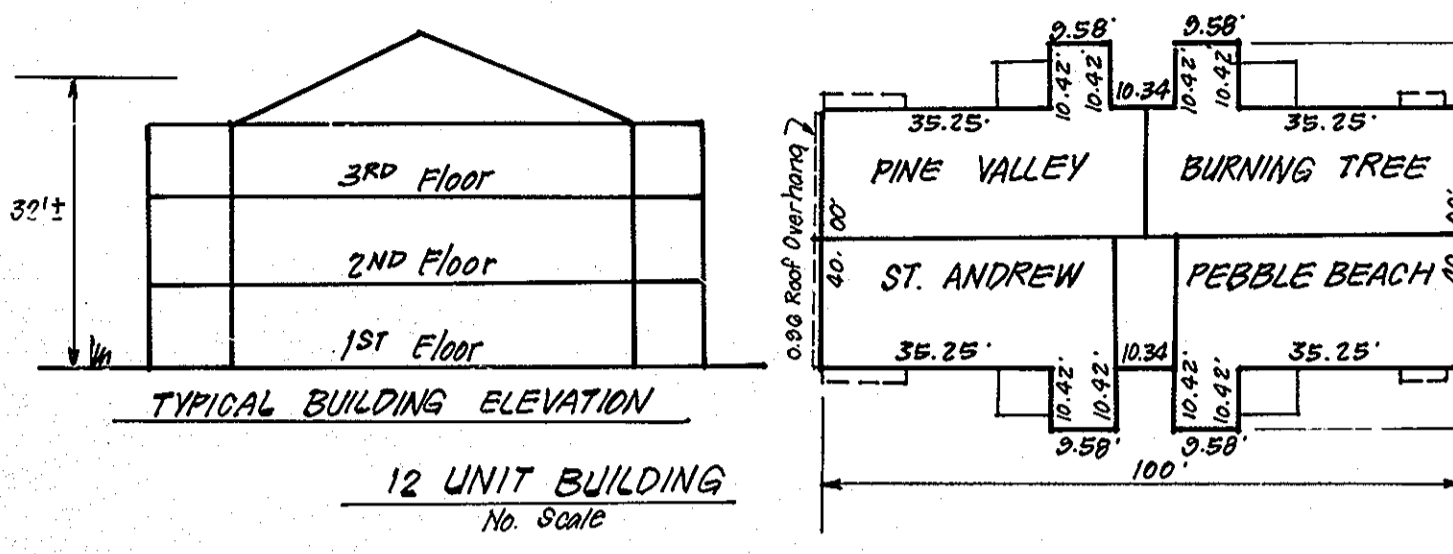
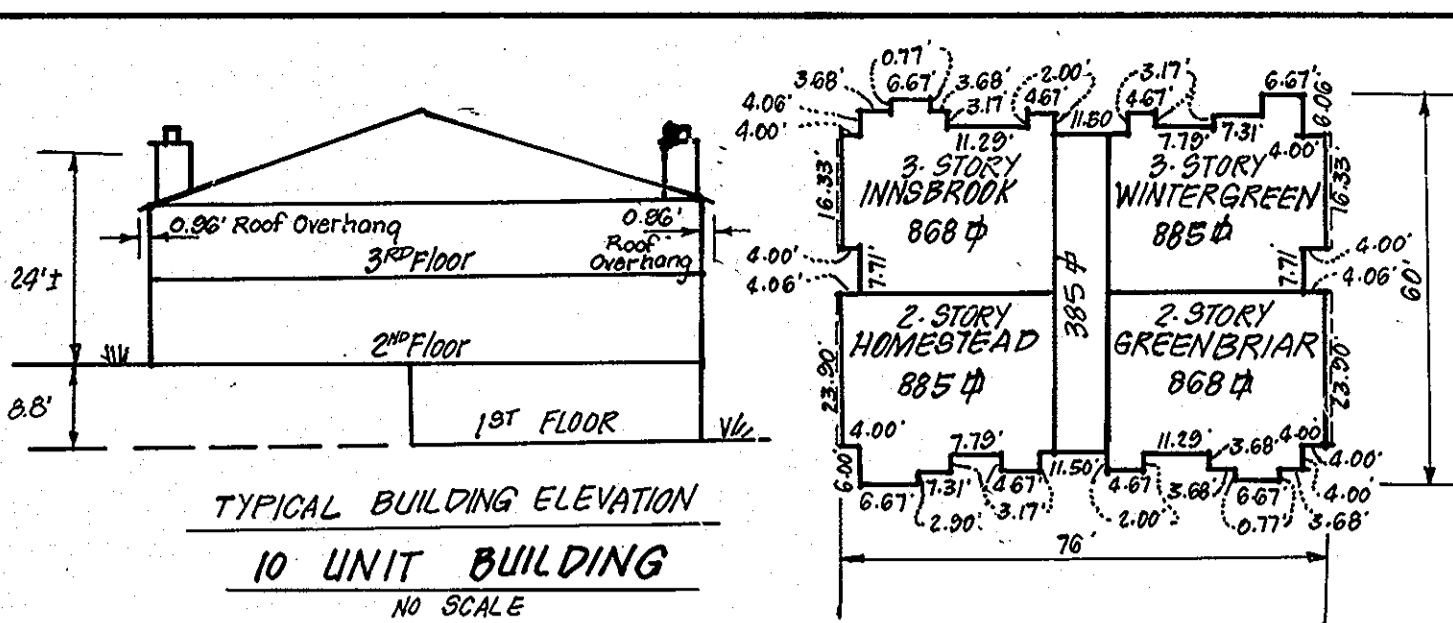
**DRAWN:** JTR **DRAWING:** 104-B

**CHECKED:** JME **JOB NO.:** 86-045

**DATE:** 4-1-88 **FILE NO.:** 86-045X

**THE RYLAND GROUP (Col. Div.)**  
7130 Minstrel Way #215  
Columbia, MD 21045

**SOP-88-124**

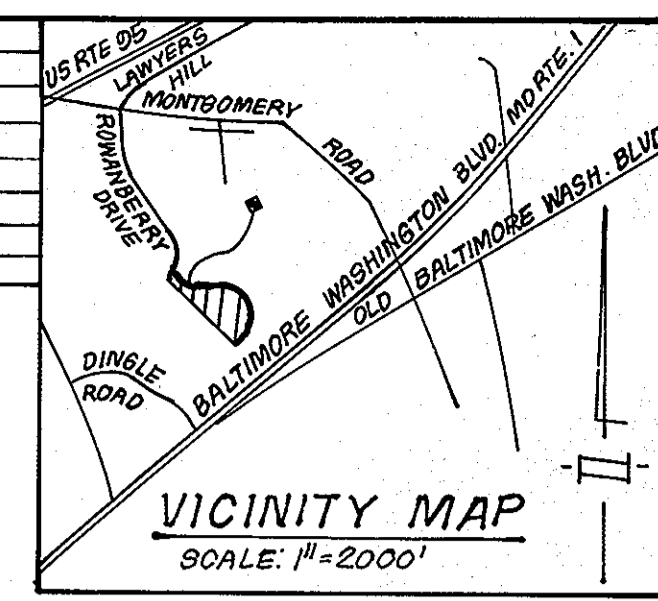


TYPICAL HOUSES  
No. Scale

No.	REVISION	Date
1	Rev. Handicap Designation of Buildings 9 & 10	5-10-89

ROCKBURN ASSOCIATES  
L 1250 F 418  
ZONED R-4-1B

BLDG No	STREET ADDRESS
11	G455 Green Field Road
10	G435 " " " "
9	G415 " " " "
8	G395 " " " "
7	G375 " " " "
6	G355 " " " "
5	G335 " " " "

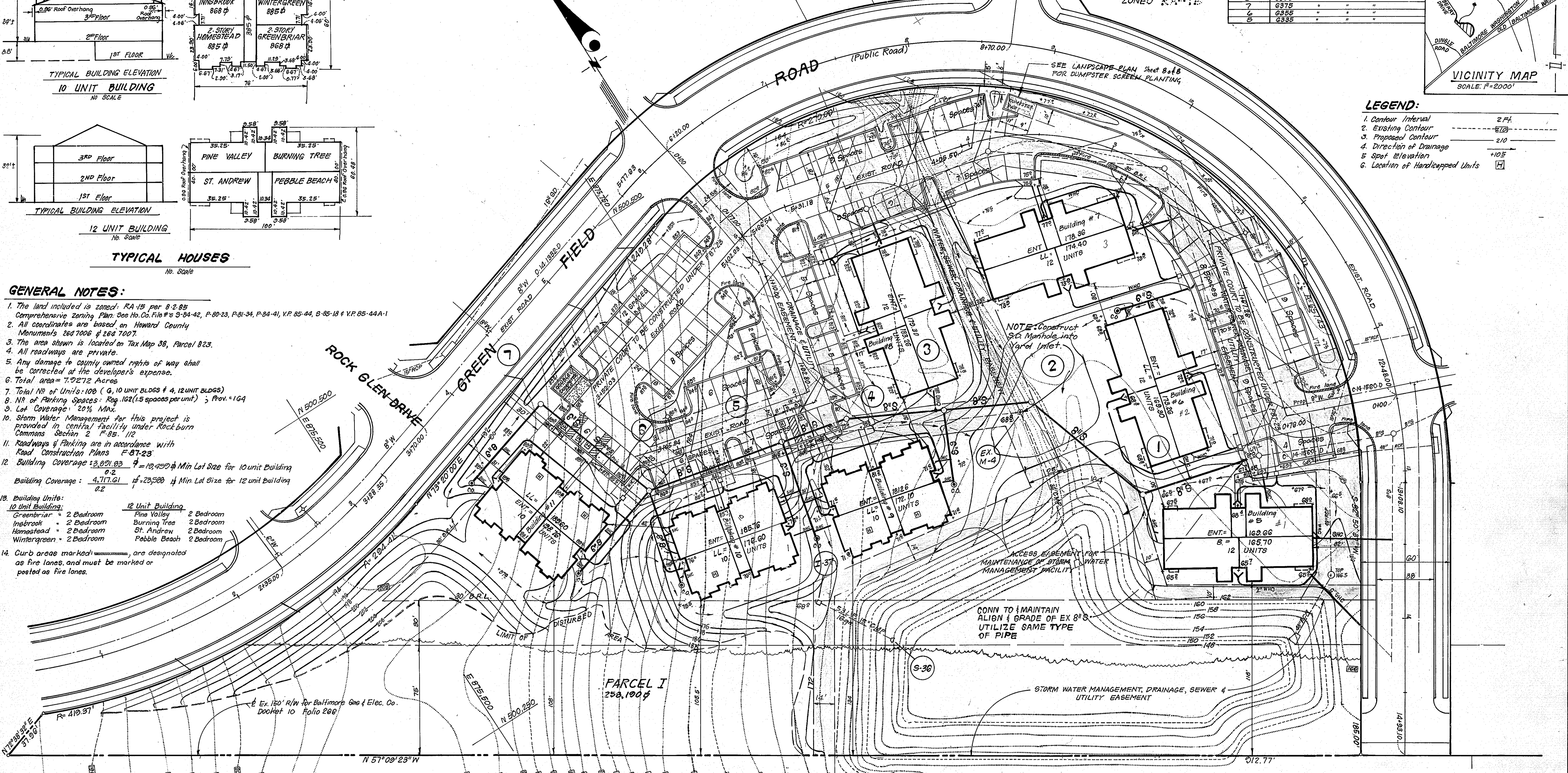


**LEGEND:**

- 1. Contour Interval 2 FT
- 2. Existing Contour 2/0
- 3. Proposed Contour 2/10
- 4. Direction of Drainage
- 5. Spot Elevation +10.5
- 6. Location of Handicapped Units

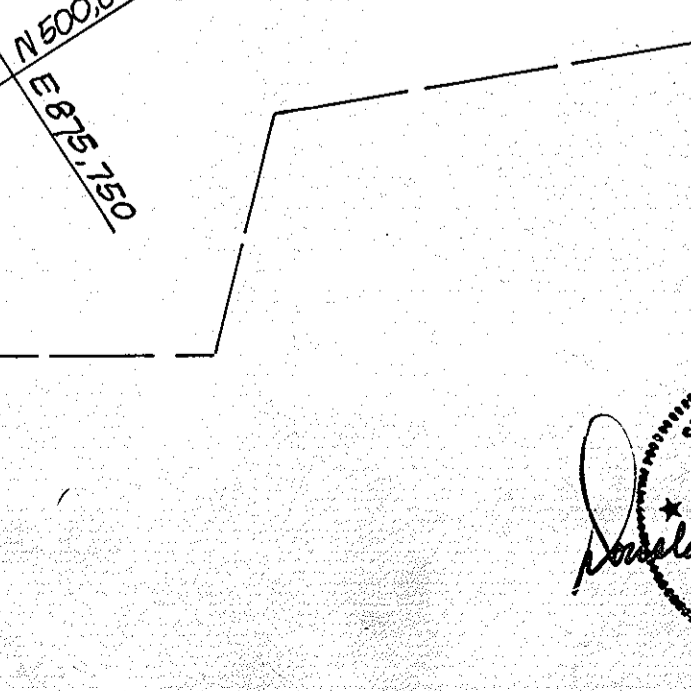
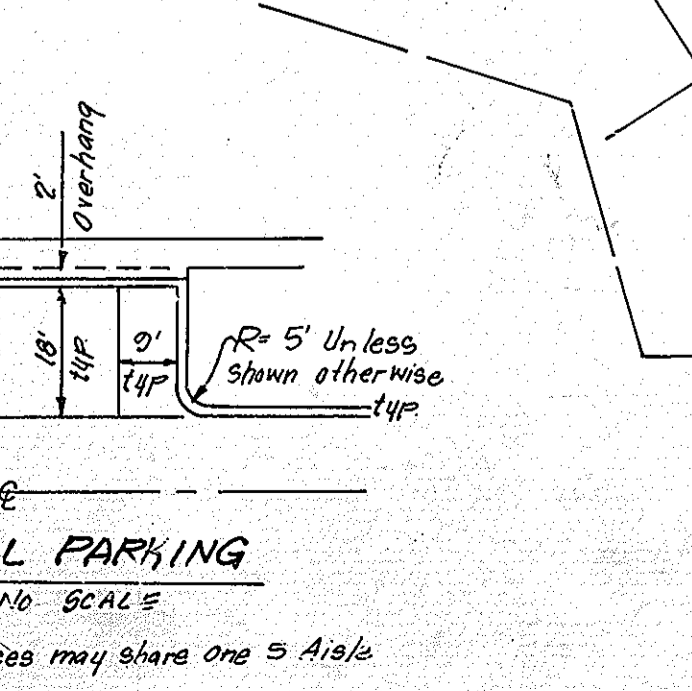
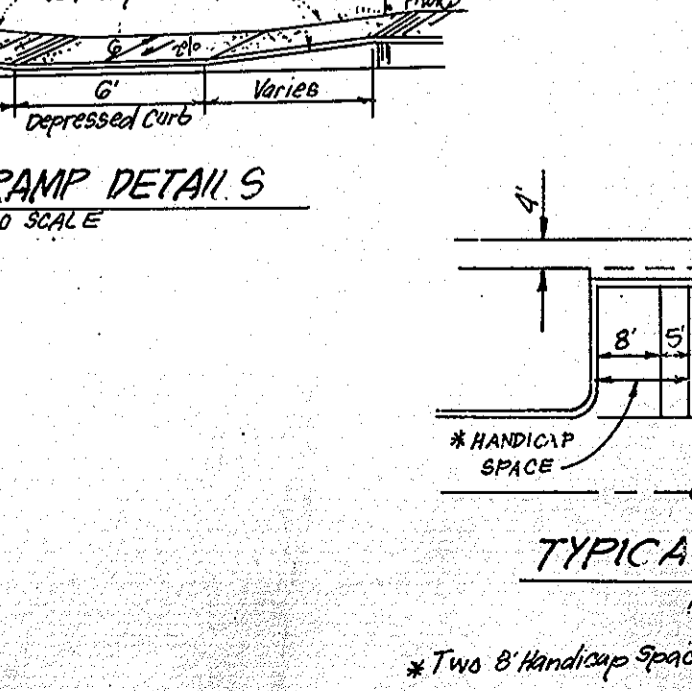
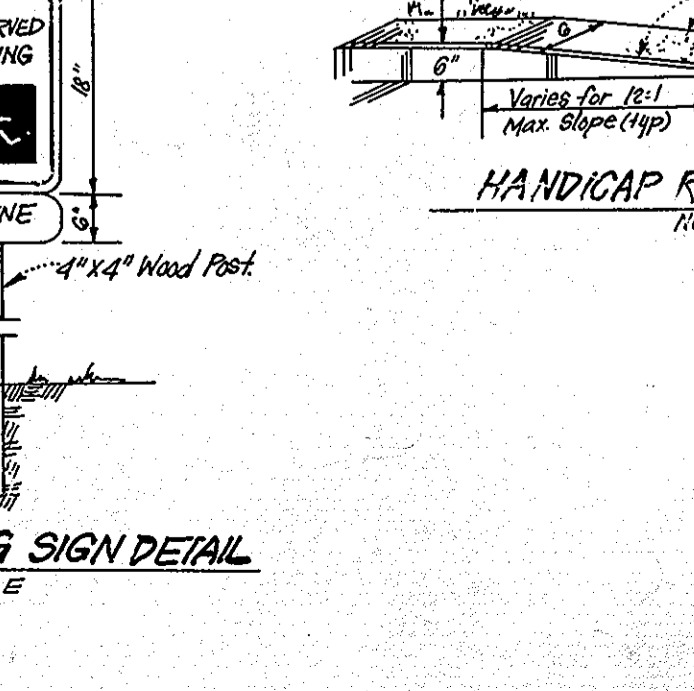
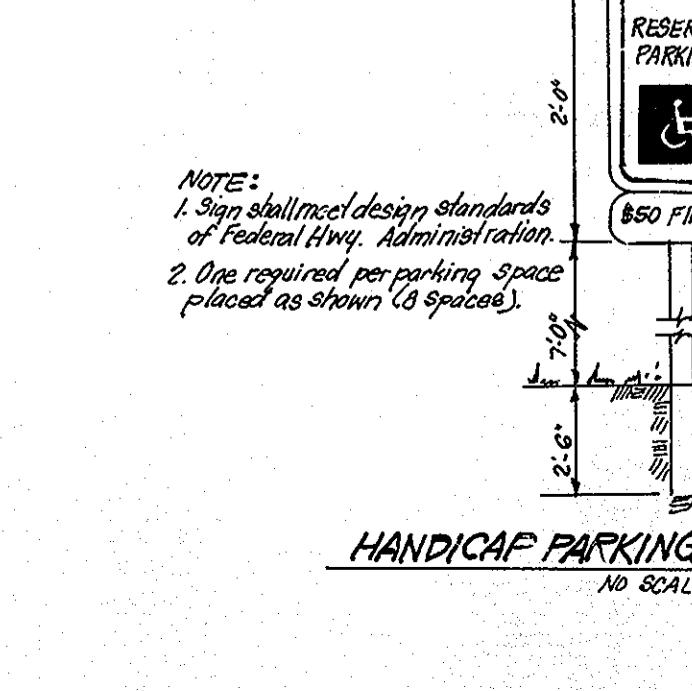
**GENERAL NOTES:**

1. The land included is zoned RA-15 per 8-2-85 Comprehensive Zoning Plan. See Ho. Co. File # 93-84-42, P-80-23, P-81-34, P-84-41, Y.P. 85-44, S-85-18 & Y.P. 85-44A-1
2. All coordinates are based on Howard County Monument's 2647006 & 2647007.
3. The area shown is located on Tax Map 38, Parcel 823.
4. All roadways are private.
5. Any damage to county owned rights of way shall be corrected at the developer's expense.
6. Total area = 7.9272 Acres
7. Total No. of Units: 108 (G, 10 UNIT BLDGS & 4, 12 UNIT BLDGS)
8. No. of Parking Spaces: Reg. 162 (1.5 spaces per unit) ; Prov. = 164
9. Lot Coverage: 20% Max.
10. Storm Water Management for this project is provided in central facility under Rockburn Commons Section 2 F-85-112
11. Roadways & Parking are in accordance with Road Construction Plans F-87-23
12. Building Coverage: 3,871.83 sq ft = 10,490 sq ft Min Lot Size for 10 unit Building  
Building Coverage: 4,717.61 sq ft = 23,588 sq ft Min Lot Size for 12 unit Building
13. Building Units:  
10 Unit Building: Greenbriar - 2 Bedroom, Inbrook - 2 Bedroom, Homestead - 2 Bedroom, Wintergreen - 2 Bedroom  
12 Unit Building: Pine Valley - 2 Bedroom, Burning Tree - 2 Bedroom, St. Andrew - 2 Bedroom, Pebble Beach - 2 Bedroom
14. Curb areas marked with hatched lines are designated as fire lanes, and must be marked or posted as fire lanes.

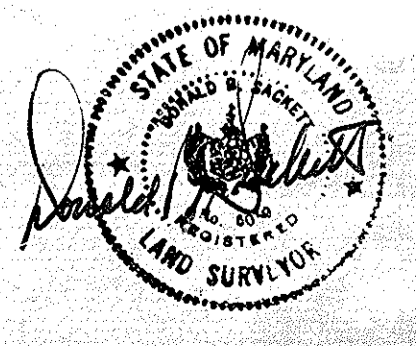


APPROVED: FOR PUBLIC WATER AND PUBLIC SEWERAGE SYSTEMS, HOWARD COUNTY HEALTH DEPARTMENT  
 COUNTY HEALTH OFFICE  
 DATE: 8/10/88  
 APPROVED: HOWARD COUNTY OFFICE OF PLANNING & ZONING  
 PLANNING DIRECTOR  
 DATE: 5-17-88  
 APPROVED: FOR PUBLIC WATER AND PUBLIC SEWERAGE, STORM DRAINAGE SYSTEMS AND PUBLIC ROADS  
 HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS  
 DIRECTOR  
 DATE: 5-10-88

APPROVED  
 DIVISION OF LAND DEVELOPMENT & ZONING ADMINISTRATION  
 HOWARD COUNTY, MARYLAND  
 DATE: 5-10-88



MARY BULMASH, et al  
 L 602 F 693  
 ZONED A-1B



**CLARK · FINEFROCK & SACKETT**  
 ENGINEERS · PLANNERS · SURVEYORS  
 7135 MINSTREL WAY · COLUMBIA, MD 21045 · (301) 381-7200 · BALTO · (301) 621-8100 · WASH.

DESIGNED: JME  
 DRAWN: JTR  
 CHECKED: JME  
 DATE: 4-1-88

**SITE DEVELOPMENT PLAN**  
 PARCELS F, G, H, & I

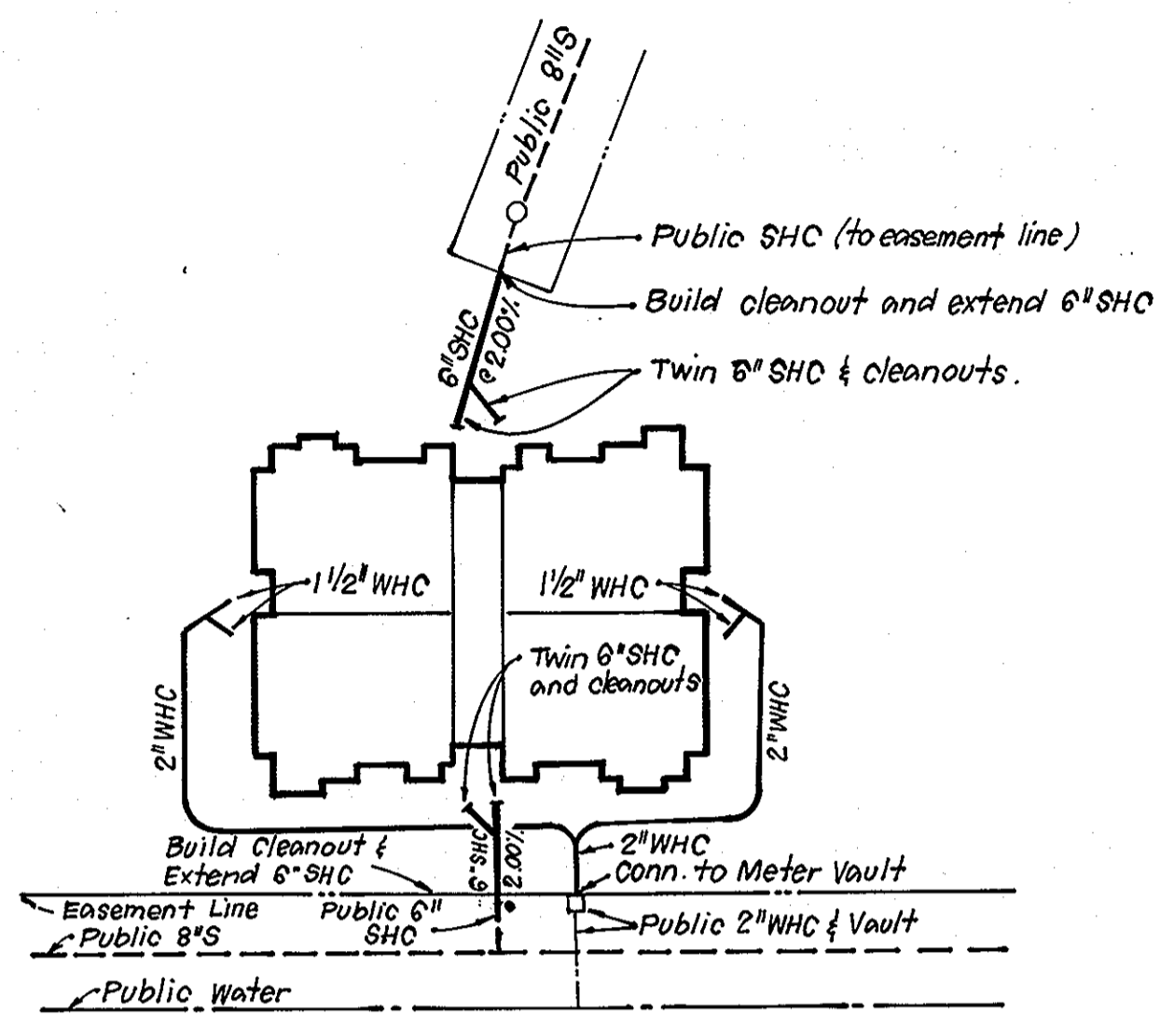
**ROCKBURN COMMONS**  
 SECTION THREE  
 1ST ELECTION DISTRICT  
 HOWARD COUNTY, MARYLAND

For: The Ryland Group (Col. Div.)  
 1120 Minstrel Way #115  
 Columbia, Md. 21045

SCALE: 1"=30'  
 DRAWING: 2 of 3  
 JOB NO.: 86-045  
 FILE NO.: 86-045X

STRUCTURE SCHEDULE $\Delta$							
No.	TYPE	INV. IN	INV. OUT	TOP ELEVATION		REMARKS	LOCATION
				UPPER	LOWER		
534	Brick Manhole	162.75	159.50	166.80	166.80	Ho. Co. Std. G.5.01 48" Rd.	See Plan
536	Metal End Section	154.25	154.00	-	-	" " " SD 5.61 Dia. 15"	See Plan
537	Inlet	-	160.80	168.80	168.80	" " " SD 4.11 2'-6" Sq.	See Plan

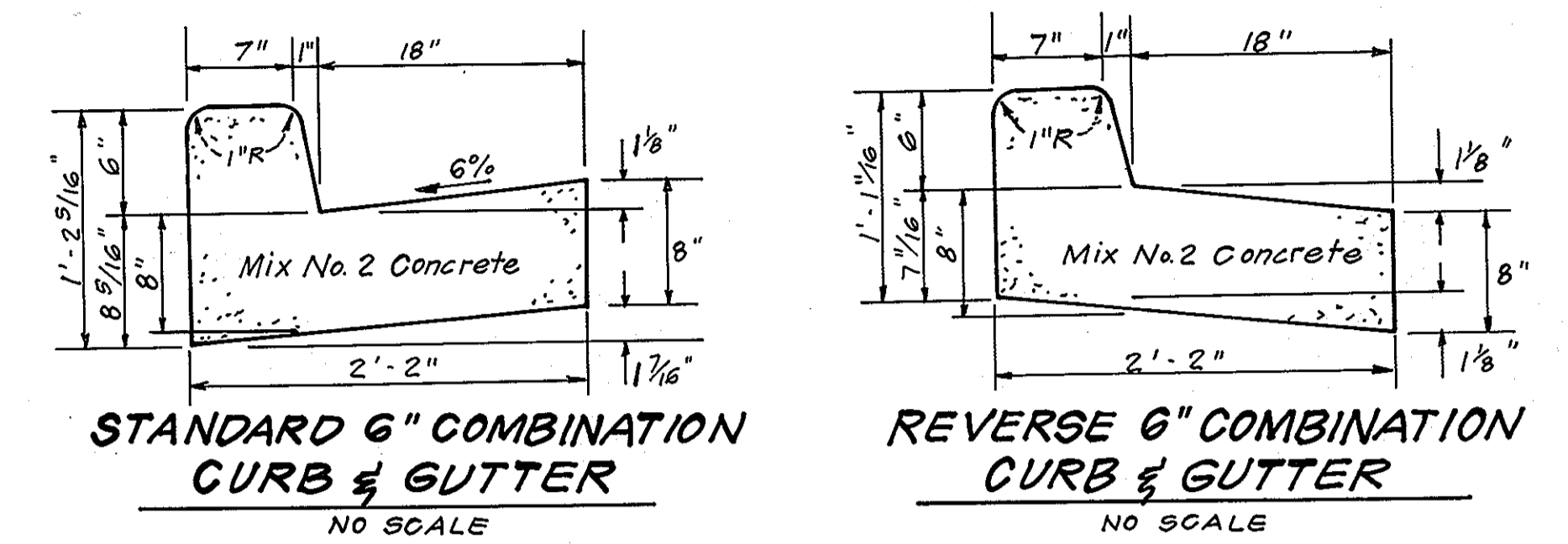
$\Delta$  All inverts to be fully developed.  
 0 Precast Manhole G.5.12 may be utilized instead of brick manhole.  
 \*\* Remove frame & cover on existing manhole & modify to accept yard inlet cast iron grating cover (See Std. SD 4.14).



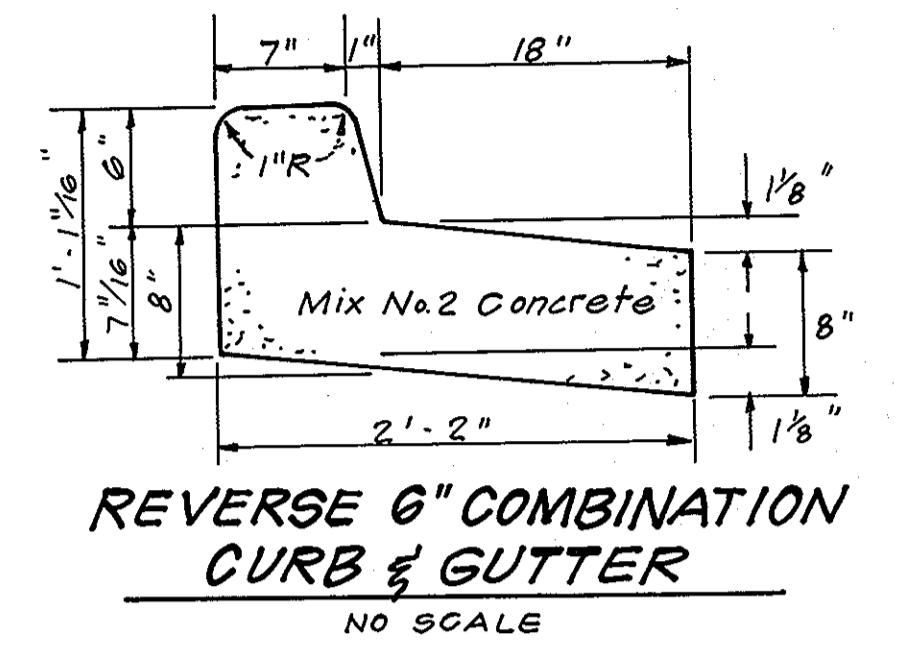
TYPICAL WATER & SEWER CONNECTIONS  
NO SCALE

- NOTES**
- All Sewer Mains shall be P.V.C., C.S.P.X., V.C.P.X. or A.C.P. Class 2400.
  - All construction methods and materials for on-site private water and sewer systems shall follow the current edition of the Howard County Plumbing Code, supplemented by the Howard County Std Details and Specs where necessary.
  - Sewer House Connections shall be built within 5 Ft of Buildings, at a slope of 2% unless shown otherwise.
  - Areas where water house connections are to be built shall be at final grade and connections shall be laid with a min. of 3.5 Ft. of cover. Water House Connections shall be seamless copper water tube, A.S.T.M. designation B 88, Soft temper, Type K.
  - Where sewer house connections are to be extended from public connections, the material shall be the same as the public portion.

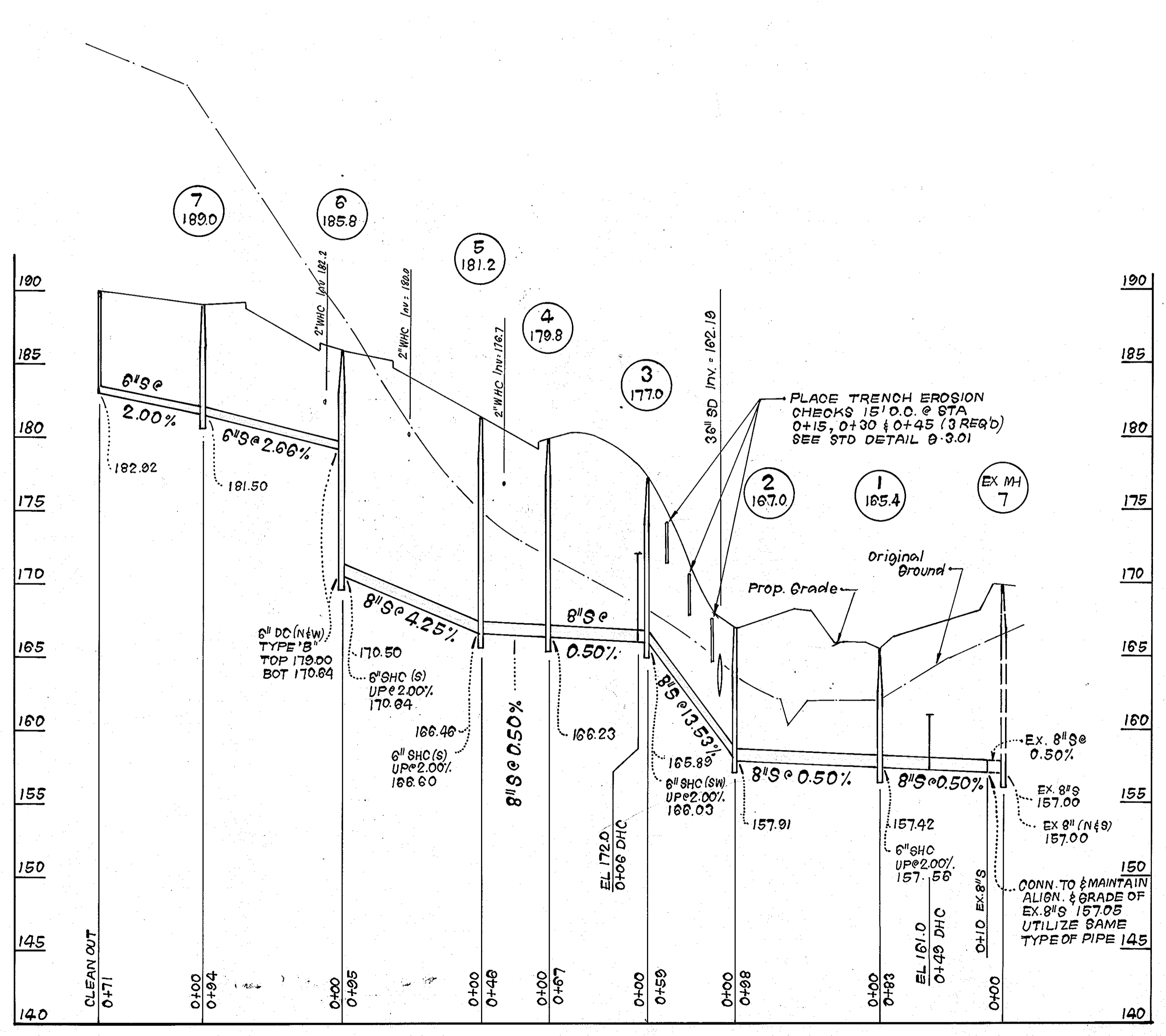
- GENERAL NOTES**
- All storm drain & paving shall be constructed in accordance with the latest edition and specifications of Howard County & MDSA.
  - Types of storm drainage refer to the Standard details of Ho. Co. & MDSA.
  - Trench compaction for storm drains within road or street right-of-way limits shall be in accordance with "Ho. Co. Design Manual, Vol. II Std. G-2.01.
  - Information concerning underground utilities was obtained from available records, but the contractor must determine the exact location and elevation of mains by digging test pits, by hand, at all utility crossings, well in advance of construction.
  - All utility companies shall be notified 24 hrs. in advance of construction.
  - All traffic services, parking and signing to be done in accordance with the "manual of Uniform Traffic Control Devices", 1978 edition.
  - The contractor or developer shall contact the construction inspection/survey division 24 hrs. in advance of commencement of work, Phone 792-7272.



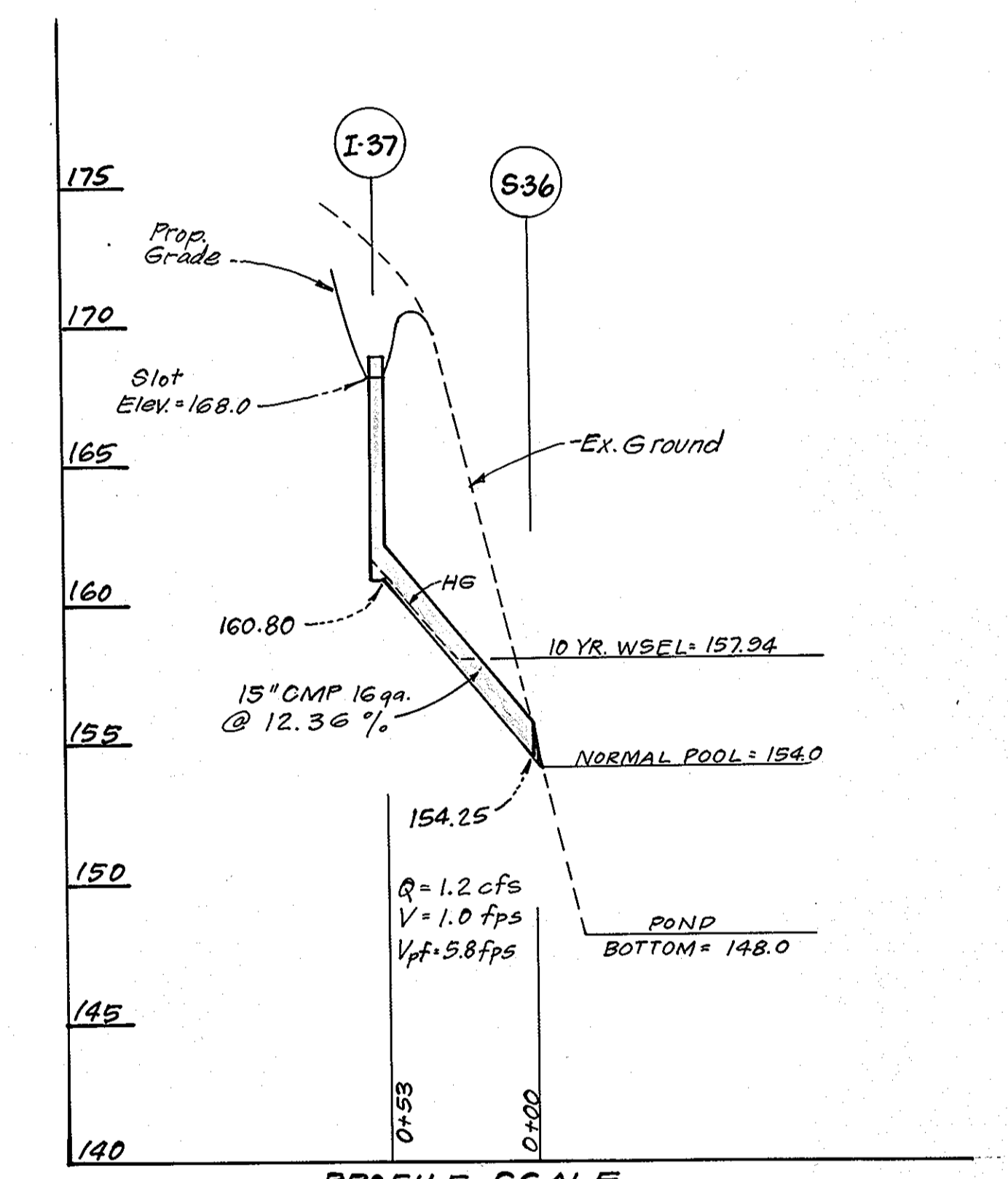
STANDARD 6" COMBINATION CURB & GUTTER  
NO SCALE



REVERSE 6" COMBINATION CURB & GUTTER  
NO SCALE



SEWER PROFILE SCALE  
HORIZONTAL: 1" = 50'  
VERTICAL: 1" = 5'



PROFILE SCALE  
Horz 1" = 50'  
Vert 1" = 5'

APPROVED: FOR PUBLIC WATER AND PUBLIC SEWERAGE SYSTEMS, HOWARD COUNTY HEALTH DEPARTMENT <i>James M. Boyd</i> M.D. per <i>SSK</i> 8/12/88 COUNTY HEALTH OFFICER DATE	APPROVED DIVISION OF LAND DEVELOPMENT & ZONING ADMINISTRATION HOWARD COUNTY, MARYLAND DATE 5-10-88
APPROVED: HOWARD COUNTY OFFICE OF PLANNING & ZONING <i>W. J. ...</i> PLANNING DIRECTOR DATE 5-12-88	
APPROVED: FOR PUBLIC WATER AND PUBLIC SEWERAGE, STORM DRAINAGE SYSTEMS AND PUBLIC ROADS HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS <i>David W. ...</i> DIRECTOR DATE 5-2-88	

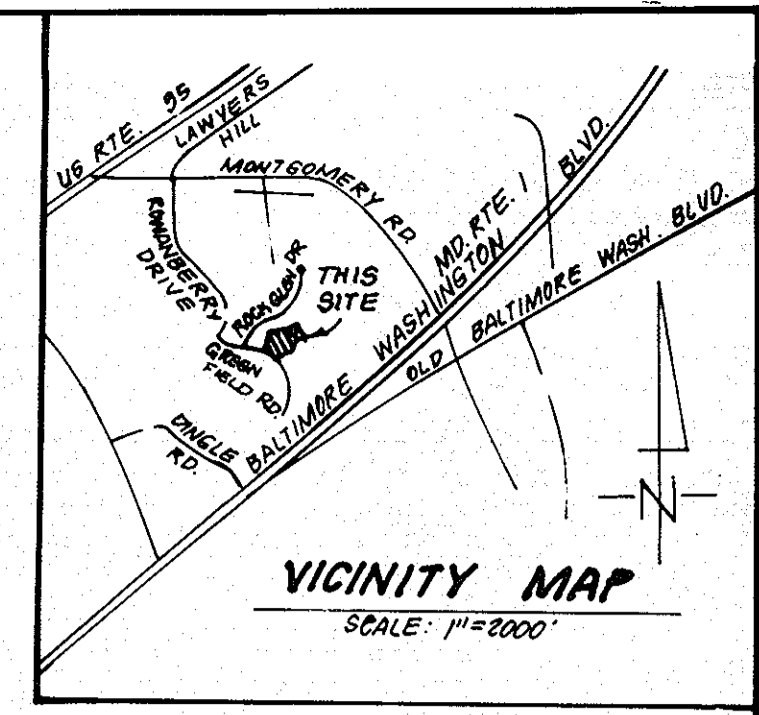
CLARK • FINEFROCK & SACKETT, INC.  
 ENGINEERS • PLANNERS • SURVEYORS  
 7135 MINSTREL WAY • COLUMBIA, MD. 21045 • (301) 381-7200 - BALTO. • (301) 621-8100 - WASH.

DESIGNED: JME  
 DRAWN: JTR  
 CHECKED: JME  
 DATE: 4-1-88

SITE DEVELOPMENT PLAN  
 SEWER PROFILES  
 PAROELS F.G.H. & I  
**ROCKBURN COMMONS**  
 SECTION THREE  
 1ST ELECTION DISTRICT  
 HOWARD COUNTY, MARYLAND

SCALE: 1" = 30'  
 DRAWING: 3 of 8  
 JOB NO.: 86-045  
 FILE NO.: 86-045X

FOR: The Ryland Group (Col. Div.)  
 7130 Minstrel Way #215  
 Columbia, Maryland 21045



**LEGEND:**

1. Contour Interval	2 FT.
2. Existing Contour	(---)
3. Proposed Contour	(- - -)
4. Direction of Drainage	(--->)
5. Spot Elevation	(+10.5)
6. Location of Handicapped Units	(H) 880/6
7. Straw Bale Dike / Silt Fence	(E.Z. (A-2))
8. Earth Dike	(---)
9. Inlet Protection Detail	(I.P.D.)
10. Stabilized Construction Entrance	(S.C.E.)

**EX. TRAP #2 S.I.S.T. ST-III\* (SDP-88-13)**  
 D.A. 1.2 Acres  
 Storage Required = 1.2 x 1800 = 2160 cf  
 Storage Provided = 2160 cf  
 Depth = 4'  
 Ex. Slot Elev. = 195.0  
 Bottom Elev. = 191.0  
 Cleanout Elev. = 193.0  
 Bottom Dimensions = 20' x 14'  
 \* 1:1 Side Slopes in cut  
 Brick shut slots on N, W & E Sides  
 NOTE: Ex. Trap to be adjusted as necessary to meet prop. slot elev. of 197.0

**TRAP #1 S.I.S.T. (ST-III)**  
 D.A. 1.3 Ac.  
 Storage Required = 1.3 (1800) = 2340 cf  
 Storage Provided = 2340 cf  
 Depth = 4'  
 Slot Elev. = 179.0  
 Bottom Elev. = 175.0  
 Cleanout Elev. = 177.0  
 Bottom Dimensions = 5' x 37'

APPROVED  
 DIVISION OF LAND DEVELOPMENT &  
 ZONING ADMINISTRATION  
 HOWARD COUNTY, MARYLAND  
 DATE 5-10-88

APPROVED: FOR PUBLIC WATER AND PUBLIC SEWERAGE SYSTEMS,  
 HOWARD COUNTY HEALTH DEPARTMENT  
 County Health Officer: *James M. Bond* Date: 8/12/88

APPROVED: HOWARD COUNTY OFFICE OF PLANNING & ZONING  
 Planning Director: *Barbara J. DeYoung* Date: 8-11-88

APPROVED: FOR PUBLIC WATER AND PUBLIC SEWERAGE,  
 STORM DRAINAGE SYSTEMS AND PUBLIC ROADS  
 HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS  
 Director: *James M. Bond* Date: 8-9-88

**DEVELOPER'S/BUILDER'S CERTIFICATE**  
 "I/We certify that all development and construction will be done according to this plan of development and plan for erosion and sediment control and that all responsible personnel involved in the construction project will have a Certificate of Attendance at a Dept. of Natural Resources Approved Training Program for the Control of Sediment and Erosion before beginning the project. I also authorize periodic on-site inspection by the Howard Soil Conservation District or their authorized agents, as are deemed necessary."  
 Signature of Developer/Builder: *Thomas M. Smith* Date: 12-16-87

Reviewed for: **HOWARD S.C.D.**  
 Name: *James M. Helm* Date: 7/15/88  
 Signature: *James M. Helm*  
 U.S. Soil Conservation Service  
 THIS DEVELOPMENT PLAN IS APPROVED FOR SOIL EROSION AND SEDIMENT CONTROL BY THE HOWARD SOIL CONSERVATION DISTRICT.  
 Approved: *Stephen L. Fisher* Date: 7/16/88

**ENGINEER'S CERTIFICATE**  
 I hereby certify that this plan for Erosion and Sediment Control represents a practical and workable plan based on my personal knowledge of the site conditions and that it was prepared in accordance with the requirements of the Howard Soil Conservation District.  
 G. Nelson Clark Date: 4-1-88

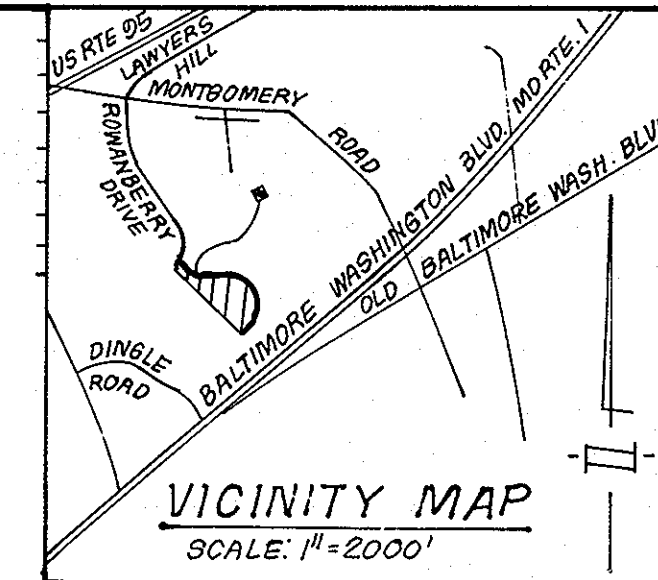
Owner / Developer:  
 Rockburn Associates  
 233 East Redwood St.  
 Suite 802  
 Baltimore, Maryland  
 21202



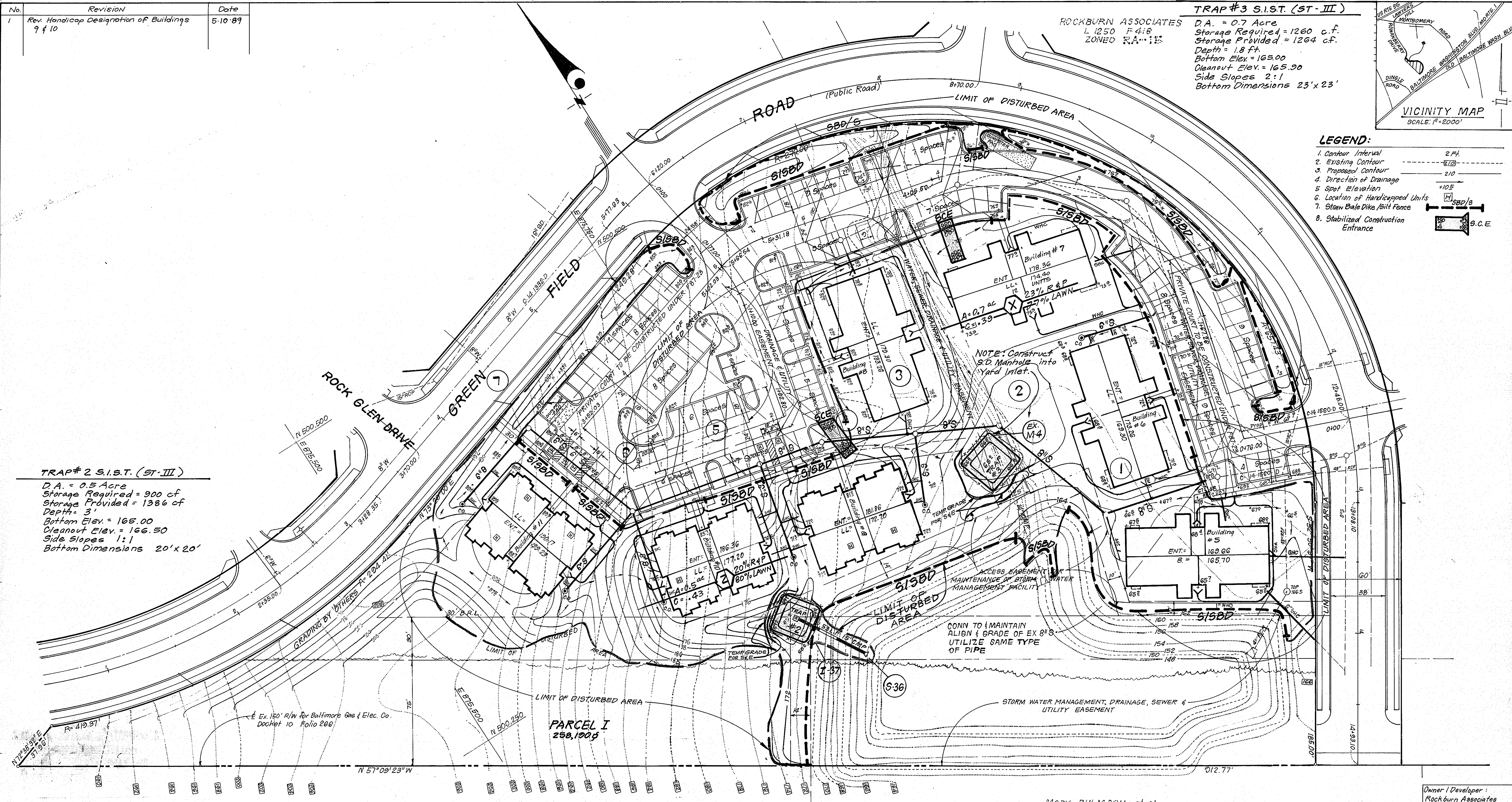
<b>CLARK · FINEFROCK &amp; SACKETT, INC.</b> ENGINEERS · PLANNERS · SURVEYORS		SCALE 1" = 30'
DESIGNED JLS	<b>SEDIMENT AND EROSION CONTROL PLAN</b> PARCELS F, G, H, & I	DRAWING 4 OF 8
DRAWN JLM		JOB NO. 86-045
CHECKED JLS	<b>ROCKBURN COMMONS</b> SECTION THREE 18 <sup>TH</sup> ELECTION DISTRICT HOWARD COUNTY, MARYLAND	FILE NO. 86-0455E
DATE 4-1-88		FOR: <i>The Ryland Group (Col. Div.)</i> 7190 Minstrel Way #215 Columbia, MD 21045

No.	Revision	Date
1	Rev. Handicap Designation of Buildings 9 of 10	5-10-89

**TRAP #3 S.I.S.T. (ST-III)**  
 D.A. = 0.7 Acre  
 Storage Required = 1260 c.f.  
 Storage Provided = 1264 c.f.  
 Depth = 1.8 ft.  
 Bottom Elev. = 165.00  
 Cleanout Elev. = 165.90  
 Side Slopes 2:1  
 Bottom Dimensions 23' x 23'



- LEGEND:**
1. Contour Interval 2 Ft.
  2. Existing Contour
  3. Proposed Contour
  4. Direction of Drainage
  5. Spot Elevation
  6. Location of Handicapped Units
  7. Straw Bale Dike / Bit Fence
  8. Stabilized Construction Entrance



**TRAP #2 S.I.S.T. (ST-III)**  
 D.A. = 0.5 Acre  
 Storage Required = 900 c.f.  
 Storage Provided = 1386 c.f.  
 Depth = 3'  
 Bottom Elev. = 165.00  
 Cleanout Elev. = 166.50  
 Side Slopes 1:1  
 Bottom Dimensions 20' x 20'

**PARCEL I**  
 258,190 sq

**APPROVED: FOR PUBLIC WATER AND PUBLIC SEWERAGE SYSTEMS.**  
 HOWARD COUNTY HEALTH DEPARTMENT  
 Joyce M. Boyd M.D. per 8/12/88  
 COUNTY HEALTH OFFICER DATE

**APPROVED: HOWARD COUNTY OFFICE OF PLANNING & ZONING**  
 Planning Director  
 Charles J. Z. Langley  
 CHIEF DIVISION OF COMMUNITY PLANNING AND LAND DEVELOPMENT  
 DATE 5-10-88

**APPROVED: FOR PUBLIC WATER AND PUBLIC SEWERAGE, STORM DRAINAGE SYSTEMS AND PUBLIC ROADS**  
 HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS  
 Director  
 William W. Venable  
 DATE 8-9-88  
 CHIEF BUREAU OF ENGINEERING

**APPROVED**  
 DIVISION OF LAND DEVELOPMENT & ZONING ADMINISTRATION  
 HOWARD COUNTY, MARYLAND  
 DATE 5-10-88

**DEVELOPER'S/BUILDER'S CERTIFICATE**

"I/We certify that all development and construction will be done according to this plan of development and plan for erosion and sediment control and that all responsible personnel involved in the construction project will have a Certificate of Attendance at a Dept. of Natural Resources Approved Training Program for the Control of Sediment and Erosion before beginning the project. I also authorize periodic on-site inspection by the Howard Soil Conservation District or their authorized agents, as are deemed necessary."

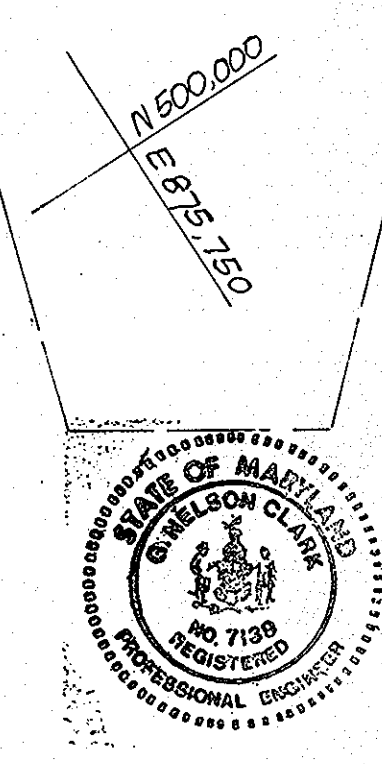
Signature of Developer/Builder: *James M. H. Helm* Date: 12-10-87

Reviewed for: *Howard* S.C.D.  
 Name  
 and meets Technical Requirements  
 Signature: *James M. Helm* Date: 1/15/88  
 U.S. Soil Conservation Service

THIS DEVELOPMENT PLAN IS APPROVED FOR SOIL EROSION AND SEDIMENT CONTROL BY THE HOWARD SOIL CONSERVATION DISTRICT.

Signature: *Stephen L. Spauld* Date: 7/15/88  
 Approved

MARY BULMASH, et al  
 L 682 F 693  
 ZONED RA-1B



**ENGINEER'S CERTIFICATE**

I hereby certify that this plan for Erosion and Sediment Control represents a practical and workable plan based on my personal knowledge of the site conditions and that it was prepared in accordance with the requirements of the Howard Soil Conservation District.

Signature: *G. Nelson Clark* Date: 12-28-87

**CLARK · FINEFROCK & SACKETT**  
 ENGINEERS · PLANNERS · SURVEYORS  
 7135 MINSTREL WAY · COLUMBIA, MD 21045 · (301) 381-7200 · BALTO · (301) 821-8100 · WASH.

**SEDIMENT & EROSION CONTROL PLAN**  
 PARCELS F, G, H, & I

**ROCKBURN COMMONS**  
 SECTION THREE  
 1ST ELECTION DISTRICT  
 HOWARD COUNTY, MARYLAND

For: The Ryland Group (Col. Div.)  
 7130 Minstrel Way #215  
 Columbia, Md 21045

DESIGNED: JLS  
 DRAWN: JTR  
 CHECKED: JLS  
 DATE: 4-1-88

SCALE: 1"=30'  
 DRAWING: 5 of 8  
 JOB NO.: 86-045  
 FILE NO.: 86-045SE

Owner / Developer:  
 Rockburn Associates  
 233 East Redwood St  
 Suite 802  
 Baltimore, Maryland  
 21202

PERMANENT SEEDING NOTES

Apply to graded or cleared areas not subject to immediate further disturbance where a permanent long-lived vegetative cover is needed.

Seedbed Preparation: Loosen upper three inches of soil by raking, discing or other acceptable means before seeding.

Soil Amendments: In lieu of soil test recommendations, use one of the following schedules

- 1) Preferred - Apply 2 tons per acre dolomitic limestone (92 lbs/1000 square ft) and 600 lbs per acre 10-10-10 fertilizer (14 lbs/1000 sq ft) before seeding.
2) Acceptable - Apply 2 tons per acre dolomitic limestone (92 lbs/1000 sq ft) and 1000 lbs per acre 10-10-10 fertilizer (23 lbs/1000 sq ft) before seeding.

Seeding - For the periods March 1 thru April 30, and August 1 thru October 15, seed with 60 lbs per acre (1.4 lbs/1000 sq ft) of Kentucky 31 Tall Fescue.

Mulching - Apply 1 1/2 to 2 tons per acre (70 to 90 lbs/1000 sq ft) of unrotted small grain straw immediately after seeding.

Maintenance - Inspect all seeded areas and make needed repairs, replacements and reseeding.

TEMPORARY SEEDING NOTES

Apply to graded or cleared areas likely to be redisturbed where a short-term vegetative cover is needed.

Seedbed Preparation: Loosen upper three inches of soil by raking, discing or other acceptable means before seeding.

Soil Amendments: Apply 600 lbs per acre 10-10-10 Fertilizer (14 lbs/1000 sq ft)

Seeding - For periods March 1 thru April 30 and from August 15 thru November 15, seed with 2 1/2 bushel per acre of annual rye (3.2 lbs/1000 sq ft).

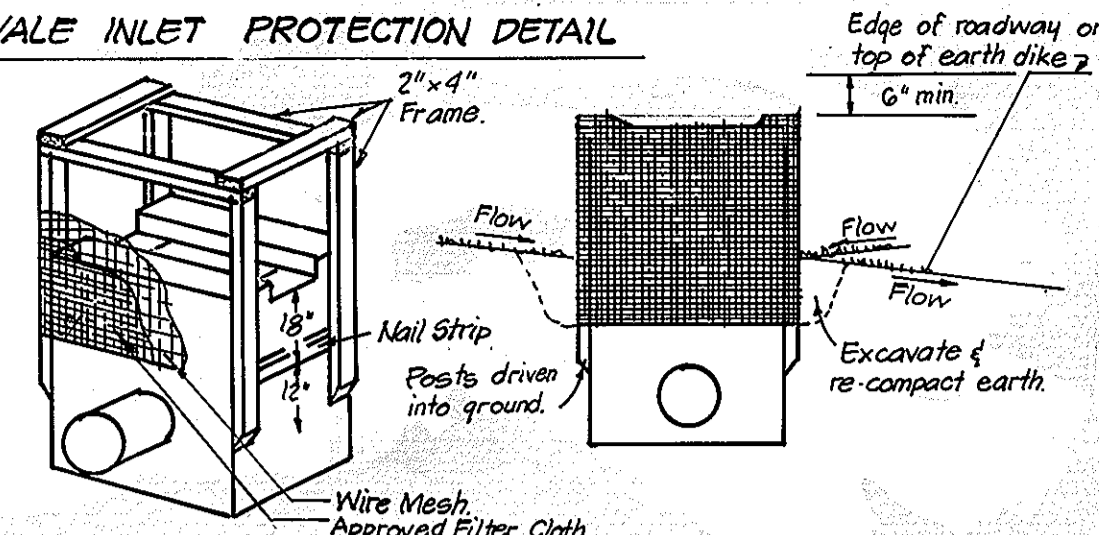
Mulching: Apply 1 1/2 to 2 tons per acre (70 to 90 lbs/1000 sq ft) of unrotted small grain straw immediately after seeding.

Refer to the 1983 MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL for rate and methods not covered.

SEDIMENT CONTROL NOTES

- 1) A minimum of 24 hours notice must be given to the Howard County Office of Inspection and Permits prior to the start of any construction.
2) All vegetative and structural practices are to be installed according to the provisions of this plan and are to be in conformance with the 1983 MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL.
3) Following initial soil disturbance or redistribution, permanent or temporary stabilization shall be completed within: a) 7 calendar days for all perimeter sediment control structures, dikes, perimeter slopes and all slopes greater than 3:1, b) 14 days as to all other disturbed or graded areas on the project site.
4) All sediment traps/basins shown must be fenced and warning signs posted around their perimeter in accordance with Vol. 1, Chapter 12, of the HOWARD COUNTY DESIGN MANUAL, Storm Drainage.
5) All disturbed areas must be stabilized within the time period specified above in accordance with the 1983 MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL for permanent seedings (Sec. 51) sod (Sec. 54), temporary seeding (Sec. 50) and mulching (Sec. 52). Temporary stabilization with mulch alone can only be done when recommended seeding rates do not allow for proper germination and establishment of grasses.
6) All sediment control structures are to remain in place and are to be maintained in operative condition until permission for their removal has been obtained from the Howard County Sediment Control Inspector
7) Site Analysis: Total Area of Site 7.98 Acres, Area Disturbed 4.20 Acres, Area to be roofed or paved 4.20 Acres, Area to be vegetatively stabilized 3.33 Acres, Total Cut 5120 Cu. yds, Total Fill 960 Cu. yds, Offsite waste/borrow area Location Undetermined
8) Any sediment control practice which is disturbed by grading activity for placement of utilities must be repaired on the same day of disturbance.
9) Additional sediment control must be provided, if deemed necessary by the Howard County DW sediment control inspector.
10) On all sites with disturbed areas in excess of 2 acres, approval of the inspection agency shall be requested upon completion of installation of perimeter erosion and sediment controls, but before proceeding with any other earth disturbance or grading. Other building or grading inspection approvals may not be authorized until this initial approval by the inspection agency is made.
11) If houses are to be constructed on an "As-Built" basis, at Random, Single Lot Sediment Control as shown below shall be implemented. N/A
12) All pipes to be blocked at the end of each day (see detail below).
13) The total amount of straw bale dikes/silt fence equals 2,400 L.F.

SWALE INLET PROTECTION DETAIL



CURB INLET PROTECTION DETAIL

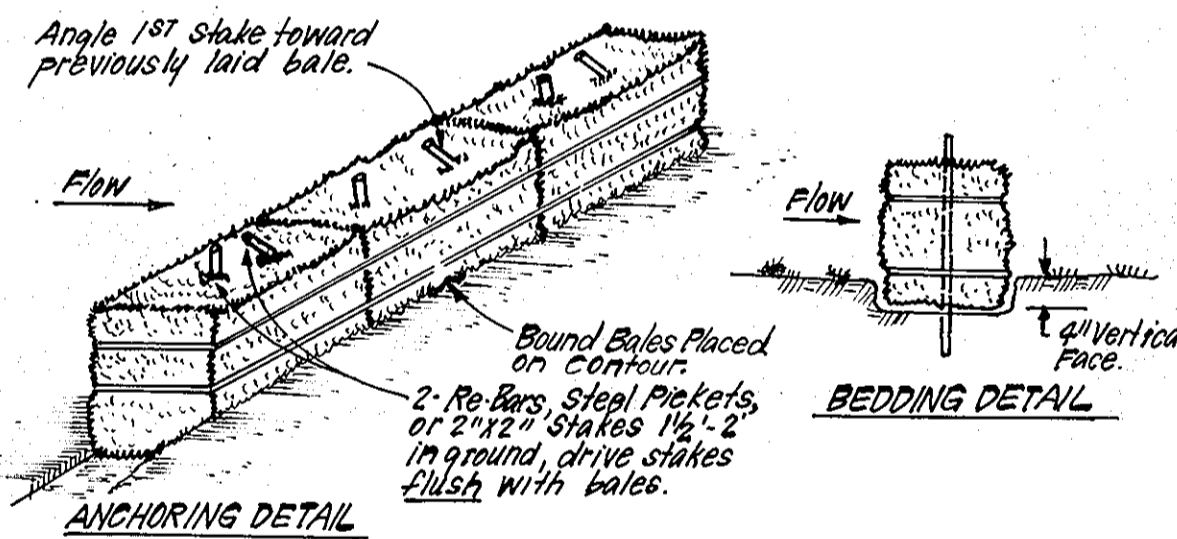
CONSTRUCTION SPECIFICATIONS:
I. MATERIALS: A. Wooden frame is to be constructed of 2x4 construction grade lumber. B. Wire mesh must be of sufficient strength to support filter fabric, and stone for curb inlets, with water fully impounded against it. C. Filter cloth must be of a type approved for this purpose; resistant to sunlight with sieve size, E6S, 40-85, to allow sufficient passage of water and removal of sediment. D. Stone is to be 2" in size and clean, since fines would clog the cloth.

II. PROCEDURE: SWALE DITCHLINE OR YARD INLET PROTECTION
1. Excavate completely around inlet to a depth of 18" below notch elevation.
2. Drive 2x4 post 1' into ground at four corners of inlet. Place nail strips between posts on ends of inlet. Assemble top portion of 2x4 frame using over lap joint shown. Top of frame (weir) must be 6" below edge of roadway adjacent to inlet.
3. Stretch wire mesh tightly around frame and fasten securely. Ends must meet at frame to 18" below inlet notch elev. Fasten securely to frame. Ends must meet at post be overlapped and folded, then fastened down.
4. Backfill around inlet in compacted 6" layers until layer of earth is even with notch elevation on ends and top elevation on sides.
5. If the inlet is not in a low point, construct a compacted earth dike in the ditch line below it. The top of this earth dike is to be at least 6" higher than the top of frame (weir).
6. The structure must be inspected frequently and filter fabric replaced when clogged.

II. PROCEDURE: CURB INLET PROTECTION
1. Attach a continuous piece of wire mesh (30" min. width by throat length plus 4") to the 2x4 weir (measuring throat length plus 2") as shown on std. drawing.
2. Place a piece of approved filter cloth (40-85 sieve) of the same dimensions as the wire mesh over the wire mesh and securely attach to the 2x4 weir.
3. Securely nail the 2x4 weir to 8" long vertical spacers to be located between the weir and inlet face (max 6' apart).
4. Place the assembly against the inlet throat and nail (min. 2" lengths of 2x4" to the top of the weir at spacer locations. These 2x4" anchors shall extend across the inlet top and be held in place by sandbags or alternate weight.
5. The assembly shall be placed so that the end spacers are a min. 1' beyond both ends of throat opening.
6. From the wire mesh and filter cloth to the concrete gutter and against the face of curb on both sides of the inlet. Place clean stone over the wire mesh and filter fabric in such a manner as to prevent water from entering the inlet under or around the filter cloth.
7. This type of protection must be inspected frequently and the filter cloth and stone replaced when clogged with sediment.
8. Assure that storm flow does not bypass inlet by installing temporary earth or asphalt dikes directing flow to inlet.

INLET PROTECTION DETAIL (I.P.D.)

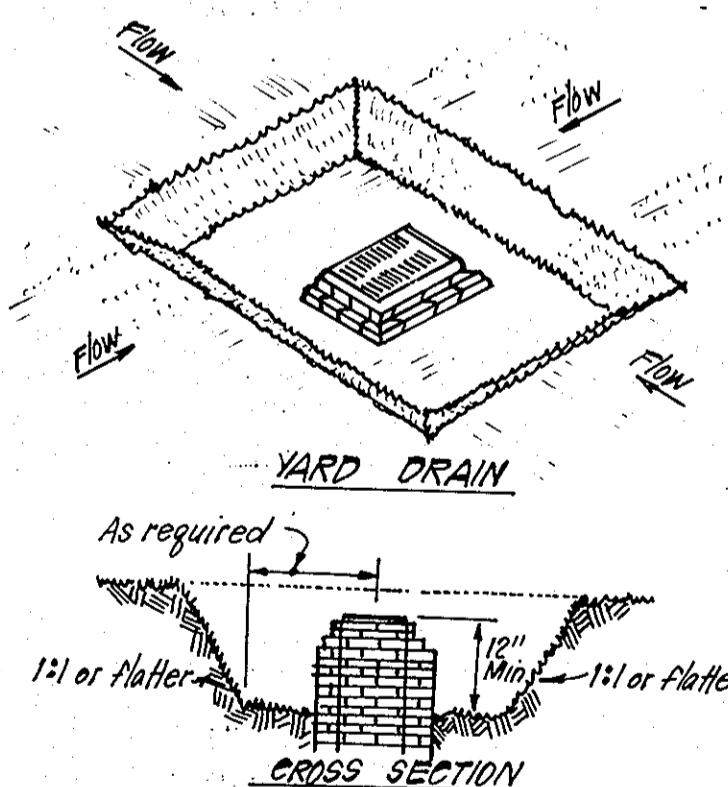
NO SCALE



CONSTRUCTION SPECIFICATIONS:
1. Bales shall be placed at the top of a slope or on the contour and in a row with ends tightly abutting the adjacent bales.
2. Each bale shall be embedded in the soil a min. of 4" and placed so the bindings are horizontal.
3. Bales shall be securely anchored in place by either 2 stakes or re-bars driven thru the bale. The 1st stake in each bale shall be driven toward the previously laid bale at an angle to force the bales together. Stakes shall be driven flush with the bale.
4. Inspection shall be frequent and repair replacement shall be made promptly as needed.
5. Bales shall be removed when they have served their usefulness so as not to block or impede storm flow or drainage.

STRAW BALE DIKE DETAIL (SBD)

NO SCALE

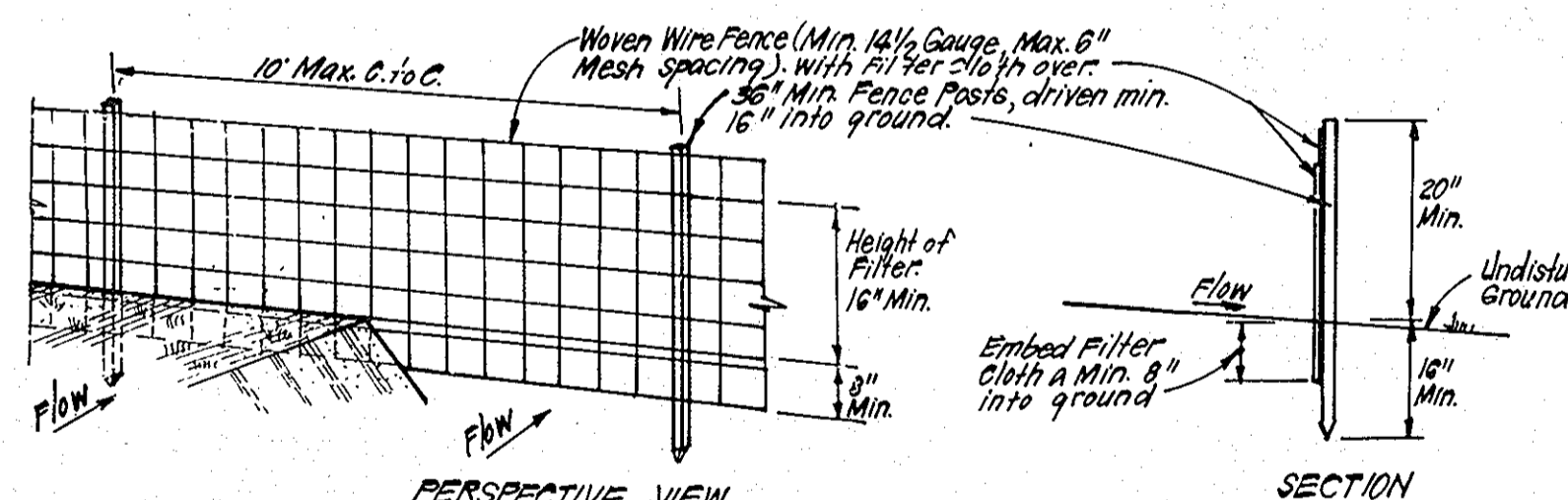


CONSTRUCTION SPECIFICATIONS:
1. Sediment shall be removed and the trap restored to its original dimensions when sediment has accumulated to 1/2 the design depth or the trap. Removed sediment shall be deposited in a suitable area and in such a manner that it will not erode.
2. The volume of sediment storage shall be 1000 c.f. per acre of contributory drainage.
3. The structure shall be inspected after each rain and repairs made as needed.
4. Construction operations shall be carried out in such a manner that erosion and water pollution shall be minimized.
5. The sediment trap shall be removed and the area stabilized when the constructed drainage area has been properly stabilized.
6. All cut slopes shall be 1:1 or flatter.

STORM INLET SEDIMENT TRAP (SIST) ST III

NO SCALE

Table with 2 columns: CONSTRUCTION SEQUENCE and NO. OF DAYS. It lists 6 steps from 'Obtain Grading Permit' to 'Upon approval of the sediment control inspector' with corresponding day counts.



CONSTRUCTION SPECIFICATIONS:
1. Woven wire fence to be fastened securely to fence posts with wire ties or staples.
2. Filter cloth to be fastened securely to woven wire fence with ties spaced every 24" at top and max. section.
3. When 2 sections of filter cloth adjoin each other they shall be overlapped by 6" and folded.
4. Maintenance shall be performed as needed and material removed when 'puddles' develop in silt fence.

SILT FENCE DETAIL (S)

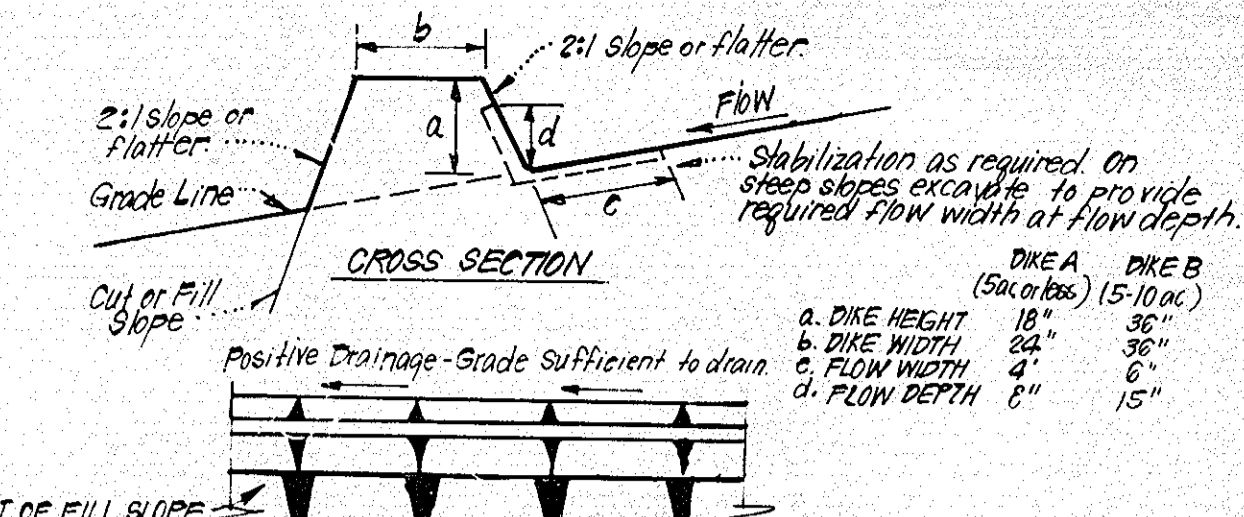
NO SCALE

APPROVED DIVISION OF LAND DEVELOPMENT & ZONING ADMINISTRATION HOWARD COUNTY, MARYLAND DATE 5-10-88

APPROVED FOR PUBLIC WATER AND PUBLIC SEWERAGE SYSTEMS, HOWARD COUNTY HEALTH DEPARTMENT. Includes signatures of James M. Bond and M.D. Pearson dated 8/14/88, and other approvals from the Planning and Zoning Department and the Chief Bureau of Engineering dated 8-18-88, 8-22-88, and 8-22-88.

Reviewed for HOWARD COUNTY S.C.D. and meets Technical Requirements. Includes signature of M. Johnson dated 7/15/88 and U.S. Soil Conservation Service approval.

THIS DEVELOPMENT PLAN IS APPROVED FOR SOIL EROSION AND SEDIMENT CONTROL BY THE HOWARD SOIL CONSERVATION DISTRICT. Includes signature of Stephen L. Johnson dated 7/15/88.

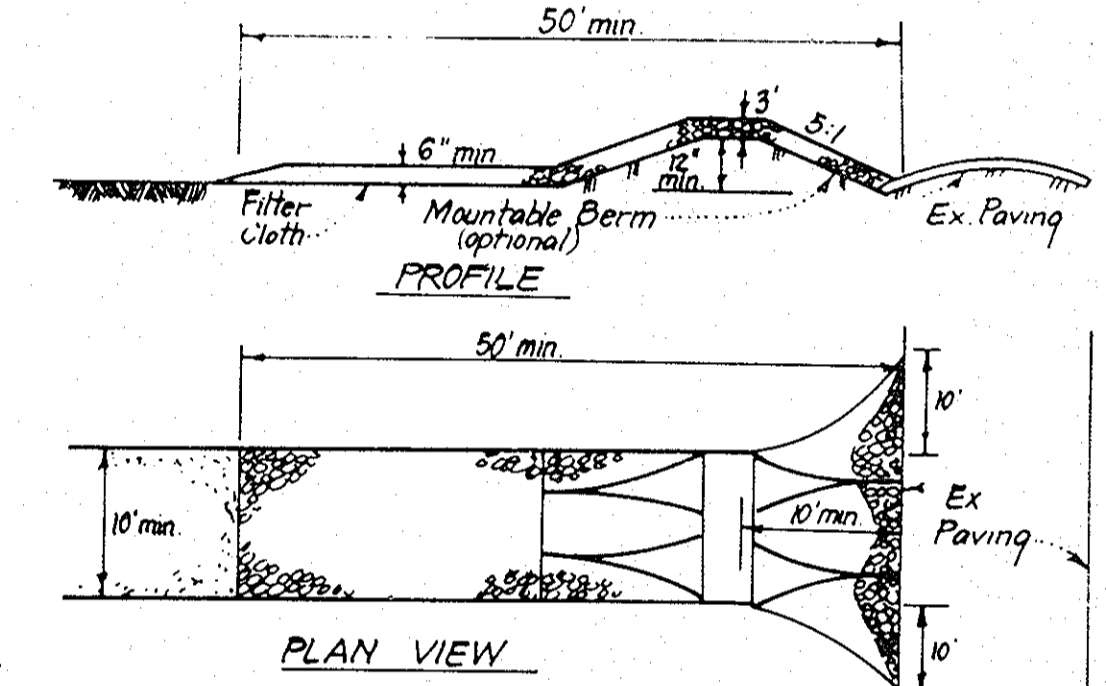


CONSTRUCTION SPECIFICATIONS:
1. All dikes shall be compacted by earth-moving equipment.
2. All dikes shall have positive drainage to an outlet.
3. Top width may be wider and side slopes may be flatter if desired, to facilitate crossing by construction equipment.
4. Field location should be adjusted as needed to utilize a stabilized safe outlet.
5. Field locations shall have an outlet that functions with a minimum of erosion. Runoff shall be conveyed to a sediment trapping device such as a sediment trap or sediment basin where either the dike channel or the drainage area above the dike are not adequately stabilized.
6. Stabilization shall be: (A) in accordance with standard specifications for seed and straw mulch or straw mulch if not in seeding season, (B) flow channel as per chart below.

Table titled 'FLOW CHANNEL STABILIZATION' with columns for 'TYPE OF TREATMENT', 'CHANNEL GRADE', 'DIKE A', and 'DIKE B'. It lists various treatments like 'Seed & Straw Mulch' and 'Lined Rip Rap' with corresponding specifications.

EARTH DIKE DETAIL (E.D.)

NO SCALE



CONSTRUCTION SPECIFICATIONS:
1. Stone size - Use 2" stone, or reclaimed or recycled concrete equivalent.
2. Length - As required, but not less than 50 feet (except on a single residence lot where a 30 foot minimum length would apply).
3. Thickness - Not less than six (6) inches.
4. Width - Ten (10) foot minimum, but not less than the full width at points where ingress or egress occurs.
5. Filter Cloth - Will be placed over the entire area prior to placing of stone. Filter will not be required on a single family residence lot.
6. Surface Water - All surface water flowing or diverted toward construction entrances shall be piped across the entrance. If piping is impractical, a mounded berm with 5:1 slopes will be permitted.
7. Maintenance - The entrance shall be maintained in a condition which will prevent tracking or flowing of sediment onto public rights-of-way. This may require periodic top dressing with additional stone as conditions demand and repair and/or cleanup of any measures used to trap sediment. All sediment spilled, dropped, washed or tracked onto public rights-of-way must be removed immediately.
8. Washing - Wheels shall be cleaned to remove sediment prior to entrance onto public rights-of-way. When washing is required, it shall be done on an area stabilized with stone and which drains into an approved sediment trapping device.
9. Periodic inspection and needed maintenance shall be provided after each rain.

STABILIZED CONSTRUCTION ENTRANCE (SCE)

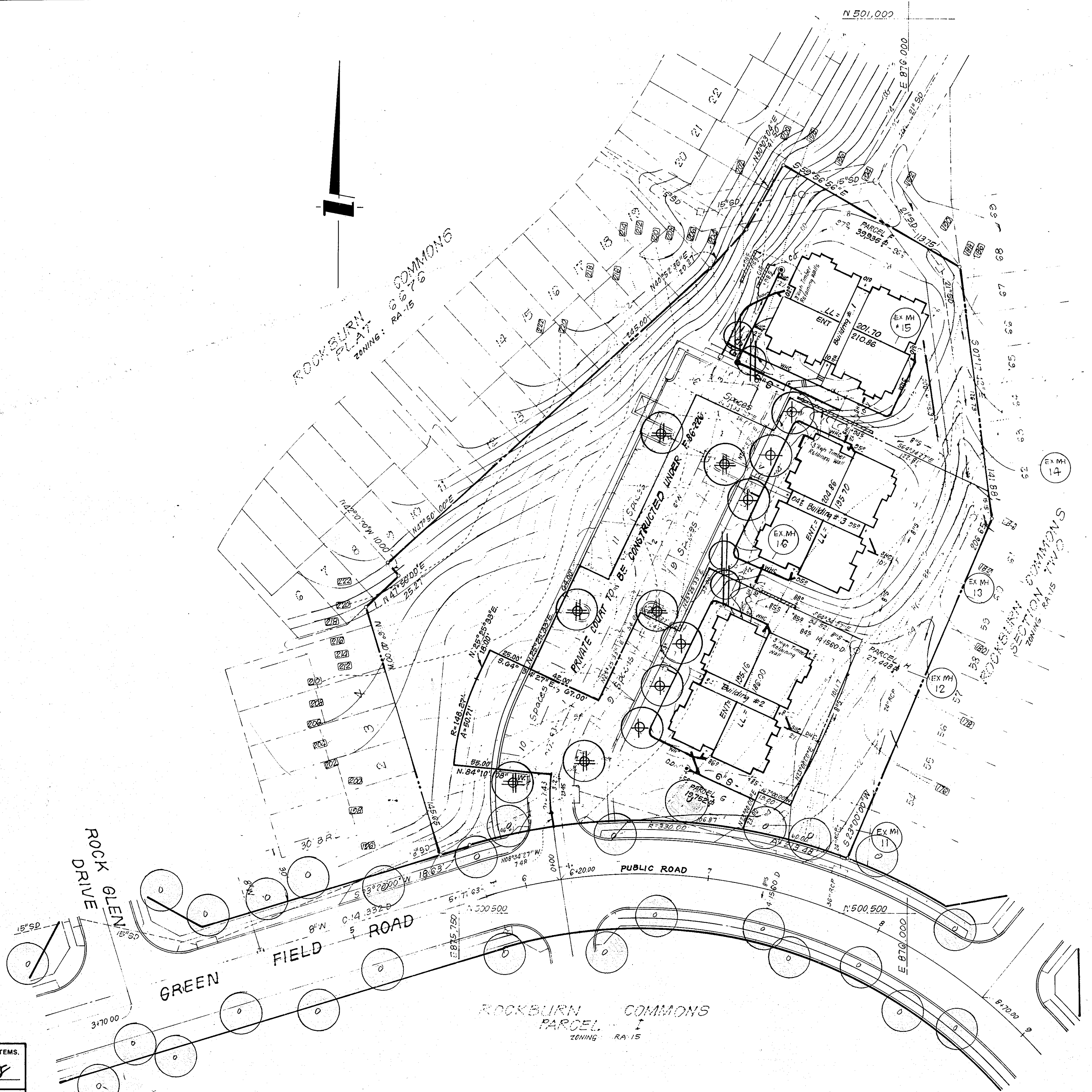
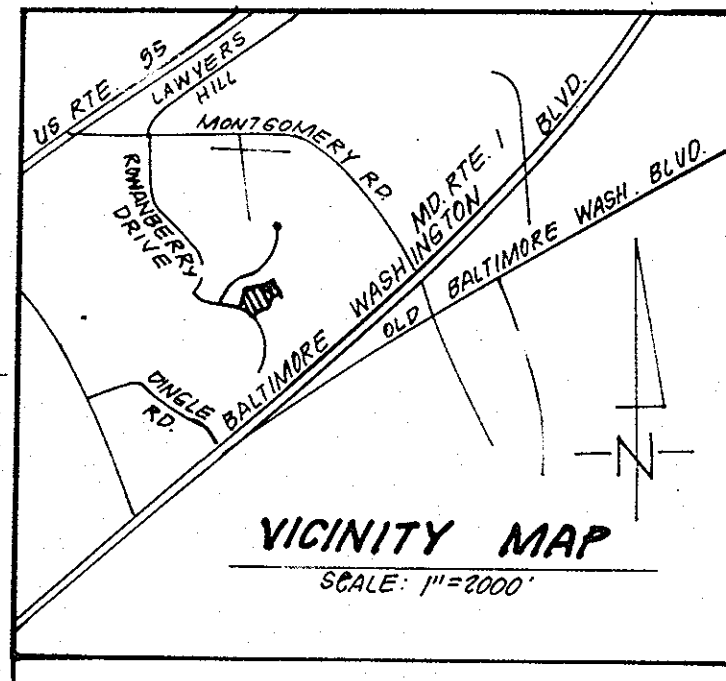
NO SCALE

DEVELOPER'S/BUILDER'S CERTIFICATE. I/we certify that all development and construction will be done according to this plan of development and plan for erosion and sediment control and that all responsible personnel involved in the construction project will have a Certificate of Attendance at a Dept. of Natural Resources Approved Training Program for the Control of Sediment and Erosion before beginning the project. Includes signature of Maurice M. Hopkins dated 9/4/87.

CLARK • FINEROCK • SACKETT, INC. ENGINEERS • PLANNERS • SURVEYORS. 7195 MINTREL WAY • COLUMBIA, MARYLAND 21045. Includes project details for 'ROCKBURN COMMONS SECTION THREE 1ST ELECTION DISTRICT HOWARD COUNTY MARYLAND' and a drawing scale of 1" = 30'.

ENGINEER'S CERTIFICATE. I hereby certify that this plan for Erosion and Sediment Control represents a practical and workable plan based on my personal knowledge of the site conditions and that it was prepared in accordance with the requirements of the Howard Soil Conservation District. Includes signature of G. Nelson Clark dated 8-7-87.

Owner / Developer: Rockburn Associates, 233 East Redwood St, Suite 802, Baltimore, Maryland 21202.



### PLANT SCHEDULE

KEY	PLANT NAME	SIZE	QUANT	REMARKS
○	PREVIOUSLY APPROVED AND BONDED STREET TREE (SEE P.85-112)			FROM 84-011.D DATED 3-5-85
⊕	ACEP. RUBRUM 'RED SUNSET'	3-2 1/2' GAL	6	B & B HEADS
⊕	RED SUNSET MAPLE	12-14' HT.	6	HEAVY HEADS
⊕	QUEBECUS RUBRA		6	
⊕	NORTHERN RED OAK		6	
⊕	MALUS SNOWCLOUD	2-2 1/2' GAL	4	
⊕	SNOWCLOUD CRABAPPLE	8-10' HT.	4	

**NOTE:**

- CONTRACTOR SHALL VERIFY LOCATION OF ALL UNDERGROUND UTILITIES PRIOR TO DIGGING.
- ALL PLANTING SHALL BE DONE IN ACCORDANCE WITH ATTACHED SPECIFICATIONS.
- SUBSTITUTIONS MAY BE PERMITTED WITH THE APPROVAL OF THE LANDSCAPE ARCHITECT, (621-8100).

**APPROVED**  
 DIVISION OF LAND DEVELOPMENT &  
 ZONING ADMINISTRATION  
 HOWARD COUNTY, MARYLAND  
 DATE 5-10-88

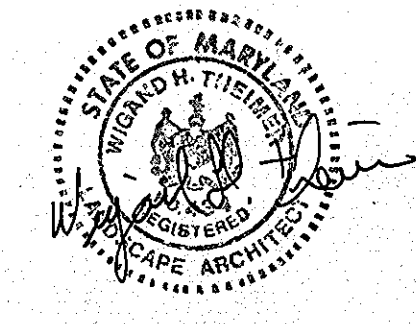
APPROVED: FOR PUBLIC WATER AND PUBLIC SEWERAGE SYSTEMS.  
 HOWARD COUNTY HEALTH DEPARTMENT  
*James M. Bond M.D. per JGM* 8/12/88  
 COUNTY HEALTH OFFICER DATE

APPROVED: HOWARD COUNTY OFFICE OF PLANNING & ZONING  
*[Signature]* 8-12-88  
 PLANNING DIRECTOR DATE

APPROVED: FOR PUBLIC WATER AND PUBLIC SEWERAGE,  
 STORM DRAINAGE SYSTEMS AND PUBLIC ROADS  
 HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS  
*[Signature]* 8-12-88  
 DIRECTOR DATE

CHIEF BUREAU OF ENGINEERING  
*[Signature]* 8-12-88  
 DATE

Owner / Developer:  
 Rockburn Associates  
 233 East Redwood St.  
 Suite 802  
 Baltimore, Maryland  
 21202



**CLARK • FINEFROCK & SACKETT**  
 ENGINEERS • PLANNERS • SURVEYORS

11315 LOCKWOOD DRIVE • SILVER SPRING, MARYLAND 20904 • (301) 593-3400

DESIGNED MBN	<b>LANDSCAPE PLANTING PLAN</b> PARCELS F, G, H, & I  <b>ROCKBURN COMMONS</b>  SECTION TWO 1ST ELECTION DISTRICT HOWARD COUNTY, MARYLAND	SCALE 1"=30'
DRAWN MBN		DRAWING 7078
CHECKED VHT		JOB NO. 86-045
DATE 12-16-87		FILE NO. 86-045
		FOR The Ryland Group (Col. Div.) 7130 Minnetonka Way # 215 Columbia Md. 21045

SDP-88-124

# PLANT SCHEDULE

KEY	PLANT NAME	SIZE	QUANT	REMARKS
⊕	ACEF RUBRUM 'RED SUNSET'	2 1/2 - 3' CAL.	9	B & B
⊕	RED SUNSET MAPLE	12-14' HT.		HEAVY HEADS
⊕	QUERCUS PUBERA		19	
⊕	NORTHERN RED OAK			
⊕	MALUS 'RADIANT'	2-2 1/2' CAL.	17	
⊕	RADIANT CHERRY	8'-10' HT.		
⊕	MALUS SNOWCLOUD		14	
⊕	SNOWCLOUD CHERRY			
⊕	PINUS THUNBERGI	6-8' HT.	29	B & B HEADS
⊕	JAPANESE BLACK PINE			
⊕	CUPRESSOPARIS LEYLANDI		16	
⊕	LEYLAND CYPRRESS			
⊕	PREVIOUSLY APPROVED AND ROUNDED STREET TREES			SEE F-05112
⊕	THUJA OCCIDENTALIS PYRAMIDALIS	4-5' HT.	29	B & B HEAVY
⊕	PYRAMIDAL ARBOVITAE			

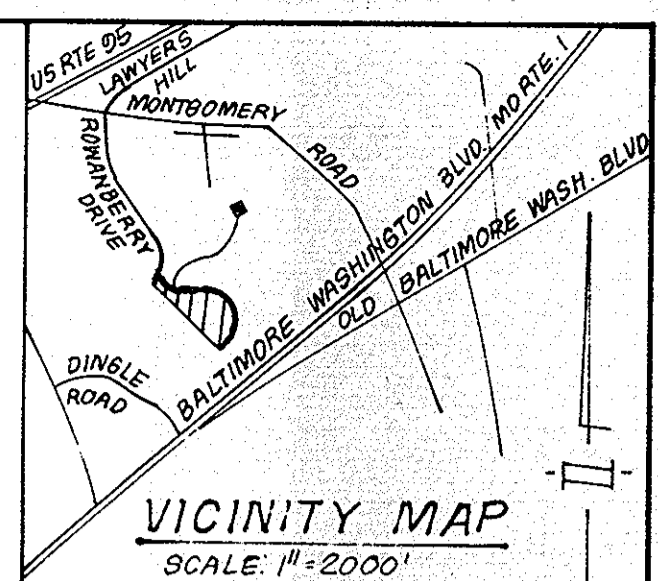
**NOTES:**

- CONTRACTOR SHALL VERIFY LOCATION OF ALL UNDERGROUND UTILITIES PRIOR TO DIGGING.
- ALL PLANTING SHALL BE DONE IN ACCORDANCE WITH ATTACHED SPECIFICATIONS.
- SUBSTITUTIONS MAY BE PERMITTED WITH THE APPROVAL OF THE LANDSCAPE ARCHITECT, (381-7500)

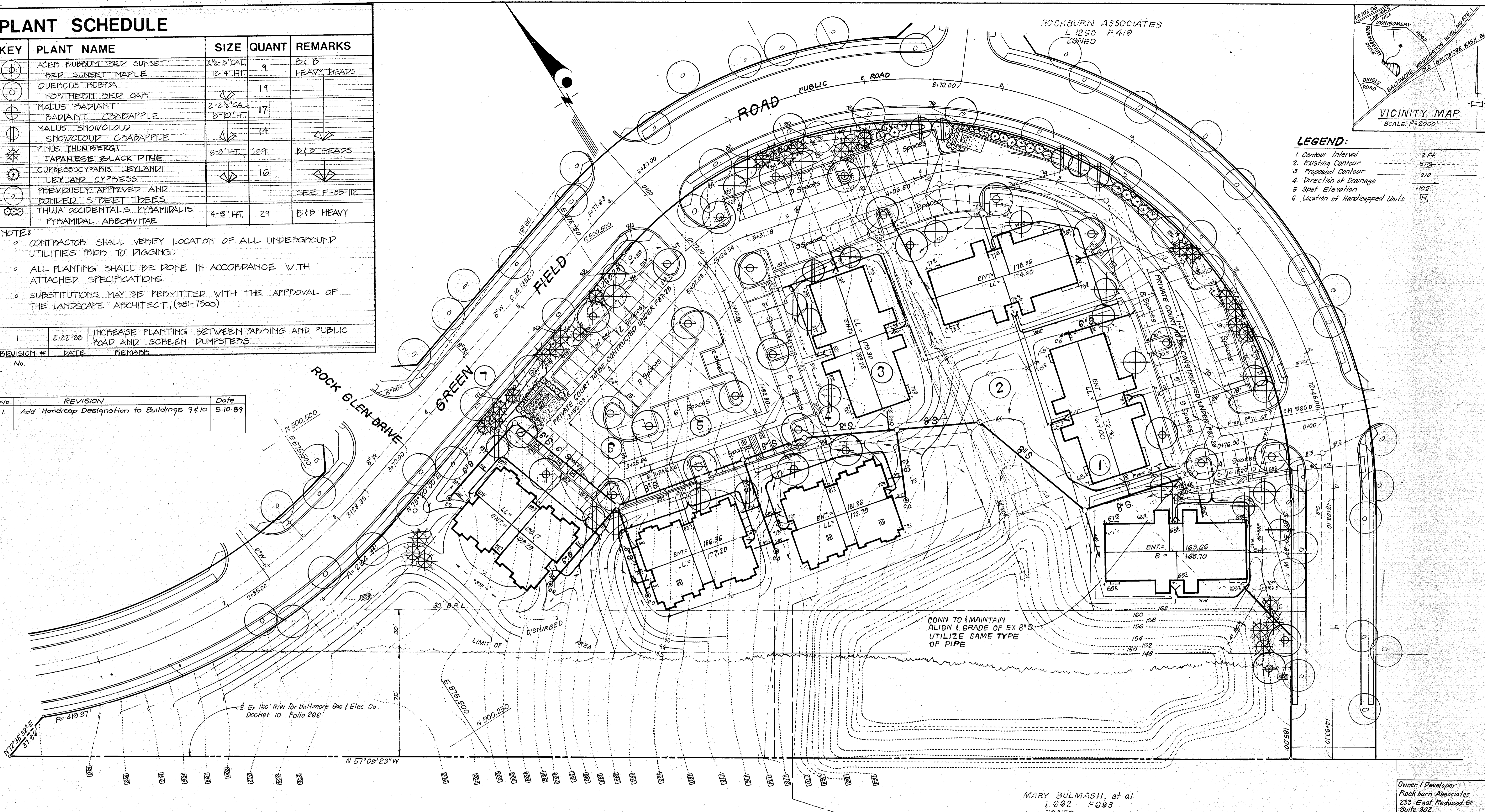
REVISION #	DATE	REMARKS
1	2-22-80	INCREASE PLANTING BETWEEN PARKING AND PUBLIC ROAD AND SCREEN DUMPSTEPS.

No.	REVISION	Date
1	Add Handicap Designation to Buildings 9 & 10	5-10-89

ROCKBURN ASSOCIATES  
L 1250 F 418  
ZONED



- LEGEND:**
- 1. Contour Interval: 2 FT
  - 2. Existing Contour: 2/20
  - 3. Proposed Contour: 2/10
  - 4. Direction of Drainage: 1/05
  - 5. Spot Elevation: 1/05
  - 6. Location of Handicapped Units: [H]



MARY BULMASH, et al  
L 602 F 093  
ZONED

Owner / Developer:  
Rockburn Associates  
233 East Redwood St  
Suite 802  
Baltimore, Maryland  
21202

APPROVED: FOR PUBLIC WATER AND PUBLIC SEWERAGE SYSTEMS.  
HOWARD COUNTY HEALTH DEPARTMENT  
*James M. Boyd M.D. per [Signature]* 8/12/88  
DATE

APPROVED: HOWARD COUNTY OFFICE OF PLANNING AND ZONING  
COUNTY HEALTH OFFICER  
*[Signature]* 8-12-88  
DATE

PLANNING DIRECTOR  
*Marsha S. Taylor* 8-12-88  
DATE

CHIEF DIVISION OF COMMUNITY PLANNING AND LAND DEVELOPMENT

APPROVED: FOR PUBLIC WATER AND PUBLIC SEWERAGE, STORM DRAINAGE SYSTEMS AND PUBLIC ROADS  
HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS  
*William W. Wassenaar* 8/12/88  
DATE

DIRECTOR  
*William W. Wassenaar* 8-12-88  
DATE

CHIEF BUREAU OF ENGINEERING  
*[Signature]* 8-12-88  
DATE

APPROVED  
DIVISION OF LAND DEVELOPMENT & ZONING ADMINISTRATION  
HOWARD COUNTY, MARYLAND  
DATE 5-10-88



**CLARK · FINEFROCK & SACKETT**  
ENGINEERS · PLANNERS · SURVEYORS  
7135 MINSTREL WAY · COLUMBIA, MD 21045 · (301) 381-7200 · BALTO · (301) 621-8100 · WASH.

DESIGNED: MBN  
DRAWN: MBN  
CHECKED: WHT  
DATE: 12-16-87

LANDSCAPE PLANTING PLAN  
PARCEL F, G, H, & I

**ROCKBURN COMMONS**  
SECTION THREE  
1ST ELECTION DISTRICT  
HOWARD COUNTY, MARYLAND

SCALE: 1"=30'  
DRAWING: 8 OF 8  
JOB NO.: 86-045  
FILE NO.: 86-045 LS

FOR: THE PINLAND GROUP (COL. PM.)  
1130 MINSTREL WAY #215  
COLUMBIA, MD 21045